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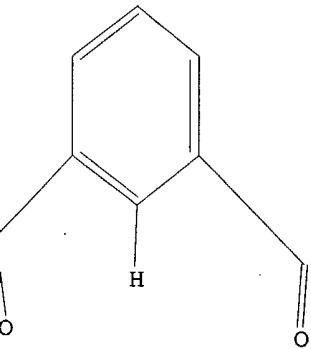
FILE COVERS 1907 - 16 Oct 2004 VOL 141 ISS 17
FILE LAST UPDATED: 15 Oct 2004 (20041015/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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l1 STRUCTURE UPLOADED

=> d l1
l1 HAS NO ANSWERS
l1 STR



Structure attributes must be viewed using STN Express query preparation.

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REGISTRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

FULL SEARCH INITIATED 13:48:24 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 497633 TO ITERATE

80.4% PROCESSED 400000 ITERATIONS 60742 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.03

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 497633 TO 497633
PROJECTED ANSWERS: 74744 TO 76392

2 60742 SEA SSS FUL l1

L3 23323 L2
=> s 13 and py<2001
20629913 PY<2001
L4 17182 L3 AND PY<2001
=> s 14 and treat?
3094869 TREAT?
L5 2693 L4 AND TREAT?
=> s 15 and (breast carcinoma or rheumatoid arthritis or osteoarthritis or heart failure)
56517 BREAST
115548 CARCINOMA
5773 BREAST CARCINOMA
(BREAST (W) CARCINOMA)
23701 RHEUMATOID
34066 ARTHRITIS
20506 RHEUMATOID ARTHRITIS
(RHEUMATOID (W) ARTHRITIS)
5833 OSTEOARTHRITIS
294581 HEART
160480 FAILURE
16179 HEART FAILURE
(HEART (W) FAILURE)
L6 27 L5 AND (BREAST CARCINOMA OR RHEUMATOID ARTHRITIS OR OSTEOARTHRITIS OR HEART FAILURE)

=> d 1-27, ibib abs hitstr

L6 ANSWER 1 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:881130 CAPLUS
DOCUMENT NUMBER: 134:42124
TITLE: Preparation of diaminothiazoles for inhibiting protein kinases
INVENTOR(S): Chu, Shao Song; Alegria, Larry Andrew; Bender, Steven Lee; Benedict, Suzanne Pritchett; Borchardt, Allen J.; Kania, Robert Steve; Nambu, Mitchell David; Tempczyk-Russell, Anna Maria; Sarshar, Sepehr
PATENT ASSIGNEE(S): Agouron Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 397 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|--------------|
| WO 2000075120 | A1 | 20001214 | WO 2000-US15188 | 20000602 <-- |
| W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| EP 1181283 | A1 | 20020227 | EP 2000-942660 | 20000602 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| BR 2000011585 | A | 20020319 | BR 2000-11585 | 20000602 |
| JP 2003501420 | T2 | 20030114 | JP 2001-501601 | 20000602 |
| EE 200100659 | A | 20030217 | EE 2001-659 | 20000602 |
| US 2002025976 | A1 | 20020228 | US 2001-783584 | 20010215 |
| US 6620828 | B2 | 20030916 | | |
| ZA 2001008291 | A | 20021009 | ZA 2001-8291 | 20011009 |
| NO 2001005045 | A | 20020204 | NO 2001-5045 | 20011017 |

BG 106276
PRIORITY APPLN. INFO.:

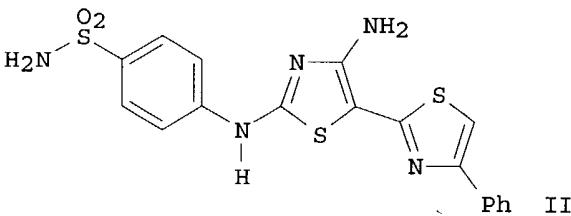
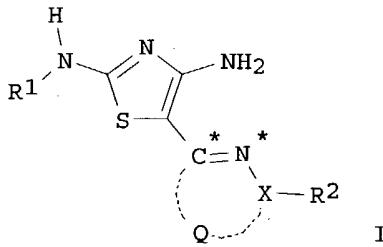
A 20021031

BG 2002-106276
US 1999-137810P
US 2000-587530
WO 2000-US15188

20020103
P 19990604
B1 20000602
W 20000602

OTHER SOURCE(S):
GI

MARPAT 134:42124



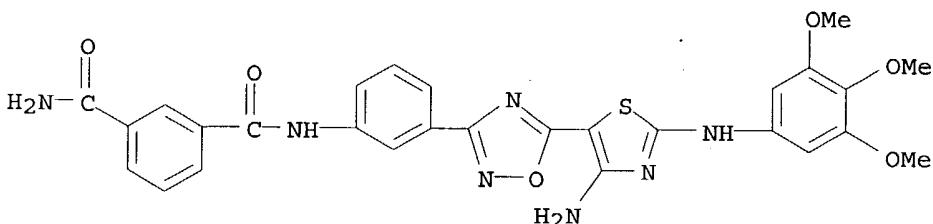
AB The title compds. [I; R1 = H, (un)substituted alkyl, cycloalkyl, etc.; R2 = OH, halo, CN, etc.; X = C, N; Q = a divalent radical having 2 or 3 atoms selected from C, N, O, S, CR5, NR5 (wherein R5 = OH, halo, CN, etc.) which together with C* and N* form a 5-6 membered (non)aromatic ring] which modulate and/or inhibit the activity of certain protein kinases (biol. data were given), and are useful in **treating** cancer as well as other disease states associated with unwanted angiogenesis and/or cellular proliferation, such as diabetic retinopathy, neovascular glaucoma, **rheumatoid arthritis**, and psoriasis, were prepared and formulated. E.g., a multi-step synthesis of diaminothiazole II was given. The compds. I and pharmaceutical compns. containing them are capable of mediating tyrosine kinase signal transduction in order to modulate and/or inhibit unwanted cell proliferation.

IT 312763-38-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of diaminothiazoles for inhibiting protein kinases)

RN 312763-38-5 CAPLUS

CN 1,3-Benzenedicarboxamide, N-[3-[5-[4-amino-2-[(3,4,5-trimethoxyphenyl)amino]-5-thiazolyl]-1,2,4-oxadiazol-3-yl]phenyl]- (9CI)
(CA INDEX NAME)



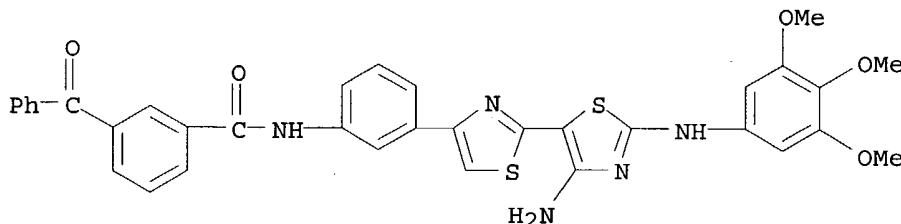
IT 312769-34-9 312770-65-3 312770-77-7

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(preparation of diaminothiazoles for inhibiting protein kinases)

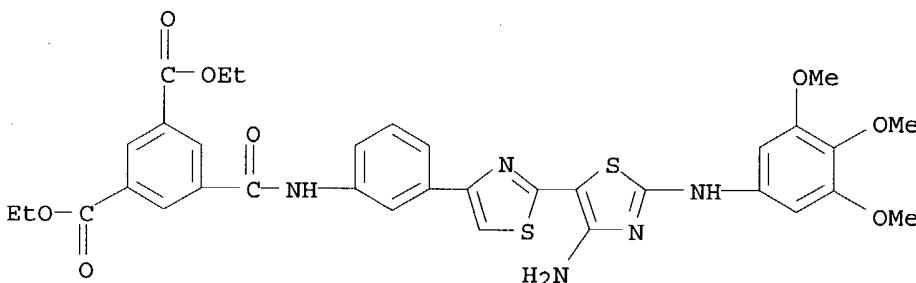
RN 312769-34-9 CAPLUS

CN Benzamide, N-[3-[4'-amino-2'-(3,4,5-trimethoxyphenyl)amino][2,5'-bithiazol]-4-yl]phenyl]-3-benzoyl- (9CI) (CA INDEX NAME)



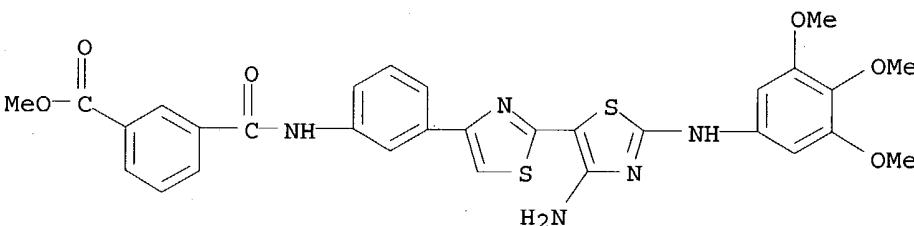
RN 312770-65-3 CAPLUS

CN 1,3-Benzenedicarboxylic acid, 5-[[[3-[4'-amino-2'-(3,4,5-trimethoxyphenyl)amino][2,5'-bithiazol]-4-yl]phenyl]amino]carbonyl-, diethyl ester (9CI) (CA INDEX NAME)



RN 312770-77-7 CAPLUS

CN Benzoic acid, 3-[[3-[4'-amino-2'-(3,4,5-trimethoxyphenyl)amino][2,5'-bithiazol]-4-yl]phenyl]amino]carbonyl-, methyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT:

4

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:824101 CAPLUS

DOCUMENT NUMBER: 134:5154

TITLE: Preparation of cyclic amine derivatives as remedies or preventives for diseases in association with chemokines or chemokine receptors

INVENTOR(S): Shiota, Tatsuki; Miyagi, Fuminori; Kamimura, Takashi; Ohta, Tomohiro; Takano, Yasuhiro; Horiuchi, Hideki

PATENT ASSIGNEE(S): Teijin Limited, Japan

SOURCE: PCT Int. Appl., 405 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

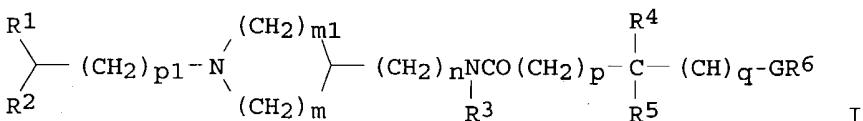
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|--------------|
| WO 2000069432 | A1 | 20001123 | WO 2000-JP3203 | 20000518 <-- |
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| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| EP 1179341 | A1 | 20020213 | EP 2000-927808 | 20000518 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| NZ 515374 | A | 20040924 | NZ 2000-515374 | 20000518 |
| NO 2001005599 | A | 20011116 | NO 2001-5599 | 20011116 |
| PRIORITY APPLN. INFO.: | | | | |
| JP 1999-175856 A 19990518 | | | | |
| JP 1999-251464 A 19990906 | | | | |
| WO 2000-JP3203 W 20000518 | | | | |

OTHER SOURCE(S) : MARPAT 134:5154
GI



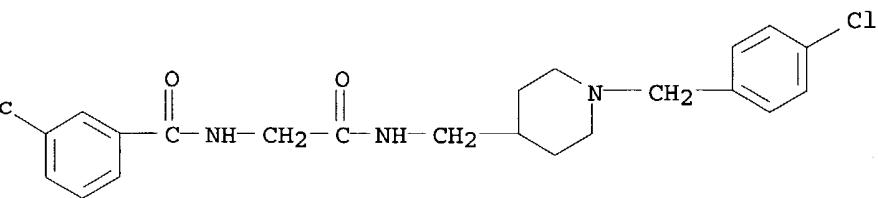
AB Remedies or preventives for diseases in association with chemokines such as MIP-1 α and/or MCP-1 or chemokine receptors such as CCR1 or CCR2 contain as the active ingredient N-acyl-amino acid N-cyclic amino or N-cyclic aminoalkyl-amide derivs. represented by general formula [I; (un)substituted Ph, C3-8 cycloalkyl, aromatic heterocyclyl containing 1-3 heteroatoms selected from O, S, and/or N; R2 = H, (un)substituted C1-6 alkyl, C2-7 alkoxy carbonyl, HO, (un)substituted Ph; p1, m1 = 0-2; m = 2-4; n = 0,1; R3 = H, (un)substituted C1-6 alkyl; R4, R5 = H, OH, (un)substituted Ph or C1-6 alkyl; or R4 and R5 are combined together to form a 3- to 5-membered hydrocarbyl; p, q = 0,1; G = CO, SO₂, CO₂, NR₇CO, CONR₇, NR₇SO₂, or SO₂NR₇, NHCONH, NHCSNH, NH CO₂, O₂CNH; R7 = H, C1-6 alkyl; or R7 and R5 are combined together to form C2-5 alkylene; R6 = (un)substituted Ph, C3-8 cycloalkyl, C3-6 cycloalkenyl, CH₂Ph, or aromatic heterocyclyl containing 1-3 heteroatoms selected from O, S, and/or N, wherein Ph, CH₂Ph, or aromatic heterocyclyl group is optionally fused with (un)substituted benzene or aromatic heterocyclyl containing 1-3 heteroatoms selected from O, S, and/or N], pharmaceutically acceptable acid-adducts thereof, or pharmaceutically acceptable C1-6 alkyl-adducts thereof. The above diseases include destruction of bone or cartilage (e.g. arthritis, **rheumatoid arthritis, osteoarthritis, osteoporosis, injury, and tumor**), nephritis, kidney diseases, glomerulus or interstitial nephritis, nephrotic syndrome, demyelinating disease, or multiple sclerosis. Thus, N-3-ethoxybenzyl-D-methionine-N-[1-(4-chlorobenzyl)-4-piperazinylmethyl]amide in vitro inhibited the binding of human MIP-1 α to THP-1 cells by >80% at 2 μ M.

IT 226231-26-1P 226232-13-9P 226232-44-6P
226232-66-2P 226232-70-8P 226233-64-3P
226233-91-6P 226241-34-5P 226241-35-6P
226241-39-0P 226241-41-4P 308360-90-9P

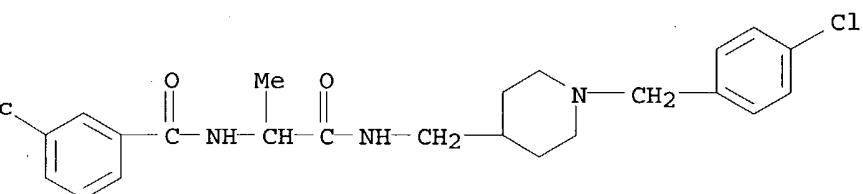
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of cyclic amine derivs. as remedies or preventives for diseases in association with chemokines or chemokine receptors)

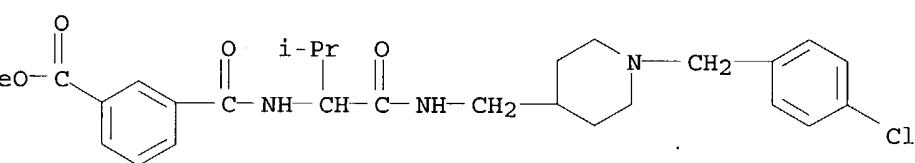
226231-26-1 CAPLUS
Benzamide, 3-acetyl-N-[2-[[[1-[(4-chlorophenyl)methyl]-4-piperidinyl]methyl]amino]-2-oxoethyl]- (9CI) (CA INDEX NAME)



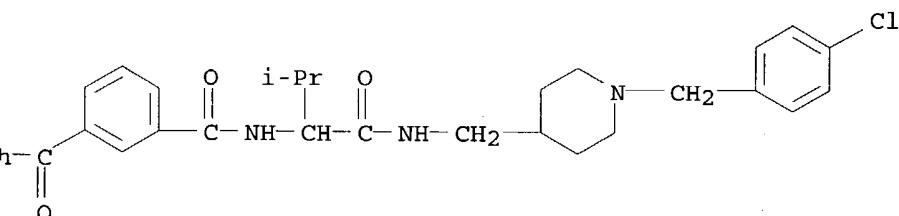
N 226232-13-9 CAPLUS
N Benzamide, 3-acetyl-N-[2-[[1-[(4-chlorophenyl)methyl]amino]-1-methyl-2-oxoethyl]-4-piperidinyl]methanamide - (9CI) (CA INDEX NAME)



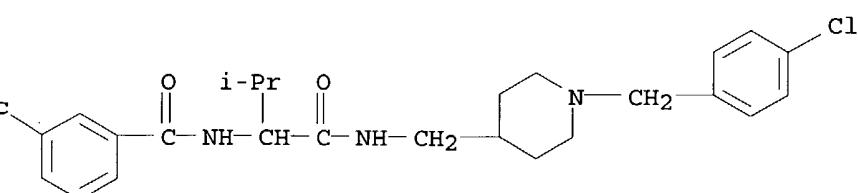
N 226232-44-6 CAPLUS
N Benzoic acid, 3-[[1-[[1-[(4-chlorophenyl)methyl]amino]carbonyl]-2-methylpropyl]amino]carbonyl-, methyl ester (9CI) (CA INDEX NAME)



N 226232-66-2 CAPLUS
N Benzamide, 3-benzoyl-N-[1-[[1-[(4-chlorophenyl)methyl]amino]carbonyl]-2-methylpropyl]- (9CI) (CA INDEX NAME)

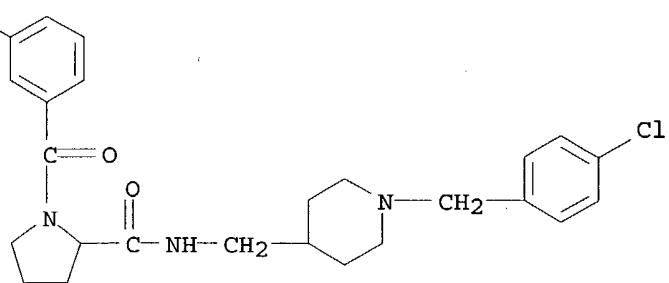


N 226232-70-8 CAPLUS
N Benzamide, 3-acetyl-N-[1-[[1-[(4-chlorophenyl)methyl]amino]carbonyl]-2-methylpropyl]- (9CI) (CA INDEX NAME)



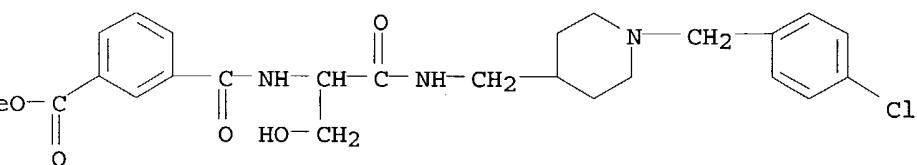
N 226233-64-3 CAPLUS

N 2-Pyrrolidinecarboxamide, 1-(3-acetylbenzoyl)-N-[[1-[(4-chlorophenyl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)



N 226233-91-6 CAPLUS

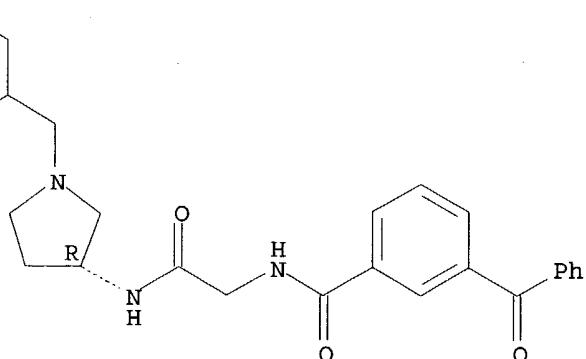
N Benzoic acid, 3-[[2-[[1-[(4-chlorophenyl)methyl]-4-piperidinyl]methyl]amino]-1-(hydroxymethyl)-2-oxoethyl]amino]carbonyl]-, methyl ester (9CI) (CA INDEX NAME)



N 226241-34-5 CAPLUS

N Benzamide, 3-benzoyl-N-[2-[(3R)-1-[(4-chlorophenyl)methyl]-3-pyrrolidinyl]amino]-2-oxoethyl]- (9CI) (CA INDEX NAME)

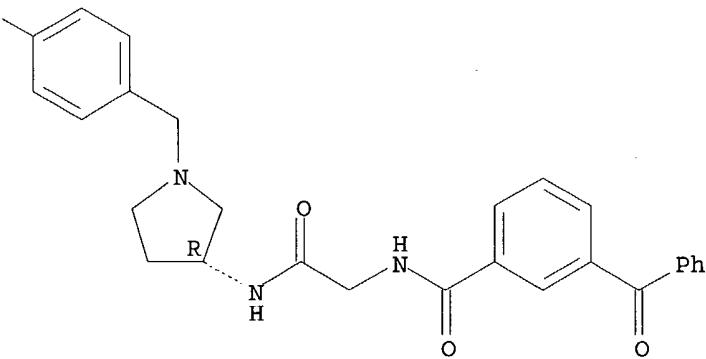
absolute stereochemistry.



N 226241-35-6 CAPLUS

N Benzamide, 3-benzoyl-N-[2-[(3R)-1-[(4-methylphenyl)methyl]-3-pyrrolidinyl]amino]-2-oxoethyl]- (9CI) (CA INDEX NAME)

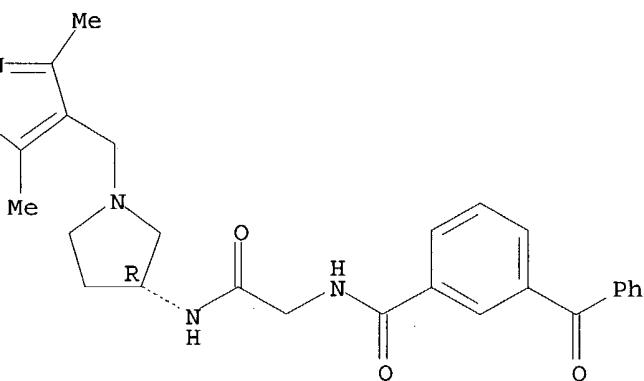
absolute stereochemistry.



226241-39-0 CAPLUS

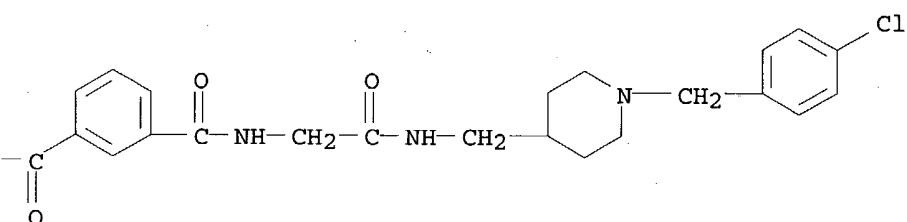
Benzamide, 3-benzoyl-N-[2-[(3R)-1-[(3,5-dimethyl-4-isoxazolyl)methyl]-3-pyrrolidinyl]amino]-2-oxoethyl] - (9CI) (CA INDEX NAME)

solute stereochemistry.



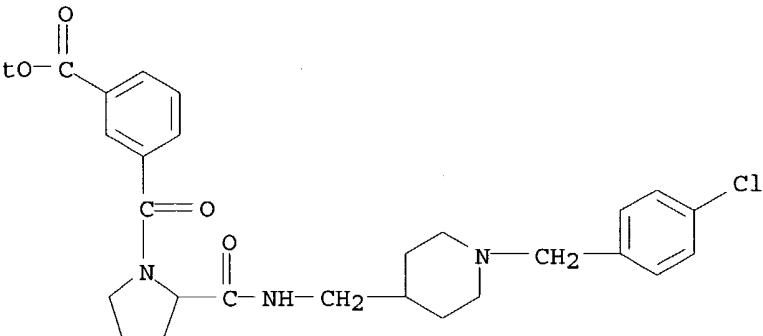
226241-41-4 CAPLUS

Benzamide, 3-benzoyl-N-[2-[[1-[(4-chlorophenyl)methyl]-4-piperidinyl]methyl]amino]-2-oxoethyl] - (9CI) (CA INDEX NAME)



308360-90-9 CAPLUS

Benzoic acid, 3-[[2-[[1-[(4-chlorophenyl)methyl]-4-piperidinyl]methyl]amino]carbonyl]-1-pyrrolidinyl]carbonyl] -, ethyl ester (9CI) (CA INDEX NAME)

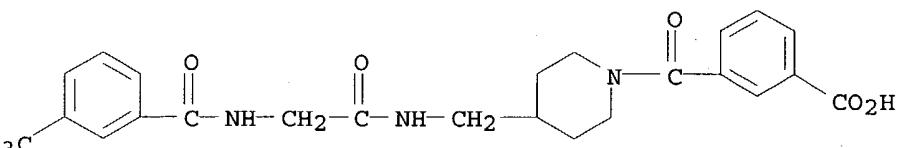


T 308363-03-3

RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of cyclic amine derivs. as remedies or preventives for diseases
in association with chemokines or chemokine receptors)

N 308363-03-3 CAPLUS

N Benzoic acid, 3-[[4-[[[[3-(trifluoromethyl)benzoyl]amino]acetyl]amino]met-
hyl]-1-piperidinyl]carbonyl- (9CI) (CA INDEX NAME)



EFERENCE COUNT:

26

THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

6 ANSWER 3 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN

CCESION NUMBER: 2000:742117 CAPLUS

OCUMENT NUMBER: 133:296665

ITLE: Preparation of amidine- or guanidine-containing
peptidomimetics for use as inhibitors of complement
proteases

NVENTOR(S): Hillen, Heinz; Schmidt, Martin; Mack, Helmut; Seitz,
Werner; Haupt, Andreas; Zechel, Johann-Christian;
Kling, Andreas

ATENT ASSIGNEE(S): BASF A.-G., Germany

OURCE: PCT Int. Appl., 212 pp.

OCUMENT TYPE: Patent

LANGUAGE: German

AMILY ACC. NUM. COUNT: 4

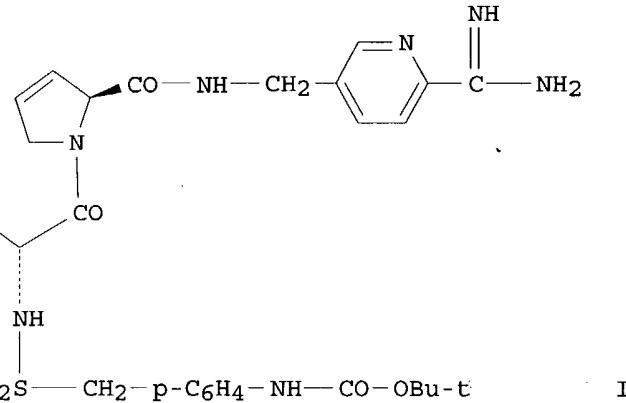
ATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|---|----------|-------------------|--------------|
| WO 2000061608 | A2 | 20001019 | WO 2000-EP2710 | 20000328 <-- |
| WO 2000061608 | A3 | 20010111 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| EP 1169338 | A2 | 20020109 | EP 2000-920597 | 20000328 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | |
| TR 200102913 | T2 | 20020121 | TR 2001-200102913 | 20000328 |
| BR 2000009678 | A | 20020122 | BR 2000-9678 | 20000328 |

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| JP 2002542164 | T2 20021210 | JP 2000-611550 | 20000328 |
| US 6683055 | B1 20040127 | US 2000-539811 | 20000330 |
| ZA 2001007978 | A 20030107 | ZA 2001-7978 | 20010928 |
| BG 105978 | A 20020731 | BG 2001-105978 | 20011004 |
| NO 2001004876 | A 20011204 | NO 2001-4876 | 20011008 |
| PRIORITY APPLN. INFO.: | | DE 1999-19915930 | A 19990409 |
| | | WO 2000-EP2710 | W 20000328 |

OTHER SOURCE(S) : MARPAT 133:296665

GI



AB The invention relates to synthesis of title compds., e.g. [I; R = cyclohexyl(II) or R = cyclohexylmethyl(III)], for use as inhibitors of the complement proteases C1s and C1r in **treatment** of disease. Compound III was synthesized in seven steps, beginning with (D)-cyclohexylalanine Me ester hydrochloride and 4-nitrobenzylsulfonyl chloride, and including reaction with 3,4-dehydroprolyl-(3-(6-cyano)picolyl)-amide and conversion of the cyano group to the amidine. In *in vivo* expts. II had IC50's for C1s and C1r resp. of 0.6 and 0.9 μ mol/l.

IT 301189-33-3P

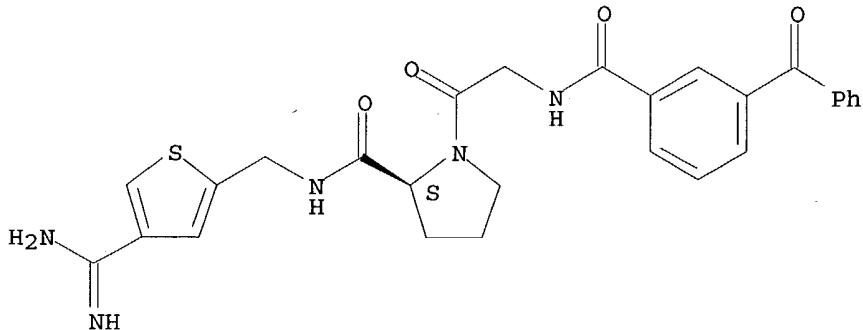
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of amidine- or guanidine-containing peptidomimetics for use as inhibitors of complement proteases)

RN 301189-33-3 CAPLUS

CN L-Prolinamide, N-(3-benzoylbenzoyl)glycyl-N-[[4-(aminoiminomethyl)-2-thienyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



TITLE: Substituted benzamilides, their preparation, and their use as CCR5 receptor modulators
 INVENTOR(S): Bondinell, William E.; Ku, Thomas W.; Wang, Ning
 PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA
 SOURCE: PCT Int. Appl., 37 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|---|--------------|
| WO 2000040239 | A1 | 20000713 | WO 1999-US30888 | 19991228 <-- |
| W: CA, JP, US RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| EP 1140072 | A1 | 20011010 | EP 1999-967619 | 19991228 |
| EP 1140072 | B1 | 20040414 | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | |
| JP 2002534383 | T2 | 20021015 | JP 2000-591996 | 19991228 |
| AT 264100 | E | 20040415 | AT 1999-967619 | 19991228 |
| | | | US 1998-114239P | P 19981230 |
| | | | US 1999-128010P | P 19990406 |
| | | | WO 1999-US30888 | W 19991228 |

PRIORITY APPLN. INFO.:

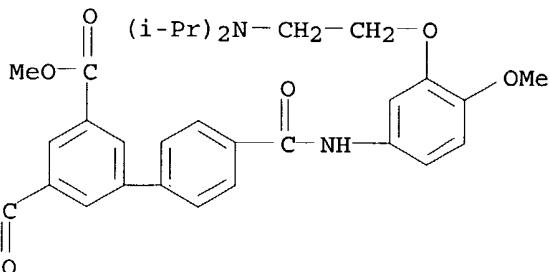
AB Substituted benzamilides are provided which are modulators, agonists or antagonists, of the CCR5 receptor. In addition, the invention relates to the treatment and prevention of disease states mediated by CCR5, including, but not limited to, asthma and atopic disorders (for example, atopic dermatitis and allergies), **rheumatoid arthritis**, sarcoidosis and other fibrotic diseases, atherosclerosis, psoriasis, autoimmune diseases such as multiple sclerosis, and inflammatory bowel disease, all in mammals, by the use of substituted benzamilides which are CCR5 receptor antagonists. Furthermore, since CD8+ T cells have been implicated in COPD, CCR5 may play a role in their recruitment and therefore antagonists to CCR5 could provide potential therapeutic in the treatment of COPD. Also, since CCR5 is a co-receptor for the entry of HIV into cells, selective receptor modulators may be useful in the treatment of HIV infection.

IT 282727-17-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(benzamilide derivative preparation and use as CCR5 receptor modulator)

RN 282727-17-7 CAPLUS

CN [1,1'-Biphenyl]-3,5-dicarboxylic acid, 4'-[[[3-[2-[bis(1-methylethyl)amino]ethoxy]-4-methoxyphenyl]amino]carbonyl]-, dimethyl ester (9CI) (CA INDEX NAME)

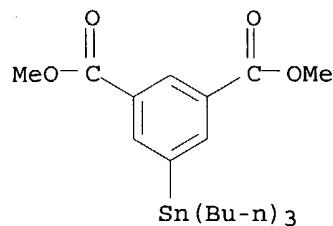


IT 210094-16-9

RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction; benzamilide derivative preparation and use as CCR5 receptor modulator)

RN 210094-16-9 CAPLUS

CN 1,3-Benzenedicarboxylic acid, 5-(tributylstannyl)-, dimethyl ester (9CI)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 5 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:335229 CAPLUS

DOCUMENT NUMBER: 132:343358

TITLE: Cystine derivatives as therapeutic agents for matrix metalloprotease-related diseases

INVENTOR(S): Grams, Frank; Krell, Hans-Willi; Leinert, Herbert; Zimmermann, Gerd

PATENT ASSIGNEE(S): Roche Diagnostics G.m.b.H., Germany

SOURCE: PCT Int. Appl., 20 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-------------------|--------------|
| WO 2000027378 | A2 | 20000518 | WO 1999-EP8460 | 19991105 <-- |
| WO 2000027378 | A3 | 20010920 | | |
| W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| BR 9915127 | A | 20010731 | BR 1999-15127 | 19991105 |
| EP 1143960 | A2 | 20011017 | EP 1999-971709 | 19991105 |
| EP 1143960 | A3 | 20011205 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| TR 200101222 | T2 | 20011221 | TR 2001-200101222 | 19991105 |
| JP 2002529404 | T2 | 20020910 | JP 2000-580607 | 19991105 |
| ZA 2001003605 | A | 20011211 | ZA 2001-3605 | 20010504 |
| PRIORITY APPLN. INFO.: | | | EP 1998-121073 | A 19981106 |
| | | | WO 1999-EP8460 | W 19991105 |

OTHER SOURCE(S): MARPAT 132:343358

AB Pharmaceutical compns. are disclosed which contain nonpeptidic cystine derivs. R1ANHCH[CH2SSCH2CH(R3ANH)(C(O)NHR4)]C(O)NHR2 [R1, R3 = H, (non)aromatic carbocyclic or heterocyclic ring, (un)branched (un)saturated C1-15 alkyl which can be interrupted by hetero atom and which can be substituted by (non)aromatic carbocyclic or heterocyclic ring; R2, R4 = H, (un)branched (un)saturated C1-15 alkyl which can be interrupted by hetero atom and which can be substituted by (non)aromatic carbocyclic or heterocyclic ring; A = valency bond, CO, SO2, NHCO, NHCS or OC(O)], their pharmacol. acceptable salts and optically active forms thereof and pharmaceutically acceptable carriers, for the treatment of diseases selected from tumor growth and metastasis; inflammatory diseases, e.g. osteo- and rheumatoid arthritis; osteoporosis; multiple sclerosis; periodontitis; restenosis; diseases caused by bacteria, e.g. meningitis; sun-induced skin aging; and Alzheimer's disease. New compds. are also

disclosed.

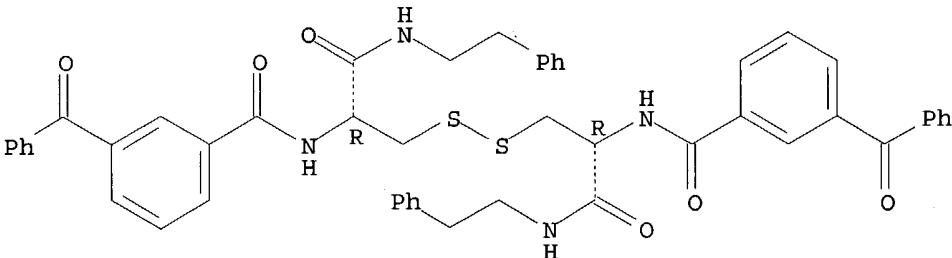
IT 269067-09-6P 269067-10-9P 269067-11-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(cystine derivative for treatment of matrix metalloprotease-related disease)

RN 269067-09-6 CAPPLUS

CN Benzamide, N,N'-(dithiobis[(1R)-1-[[[(2-phenylethyl)amino]carbonyl]-2,1-ethanediyl]bis[3-benzoyl- (9CI) (CA INDEX NAME)

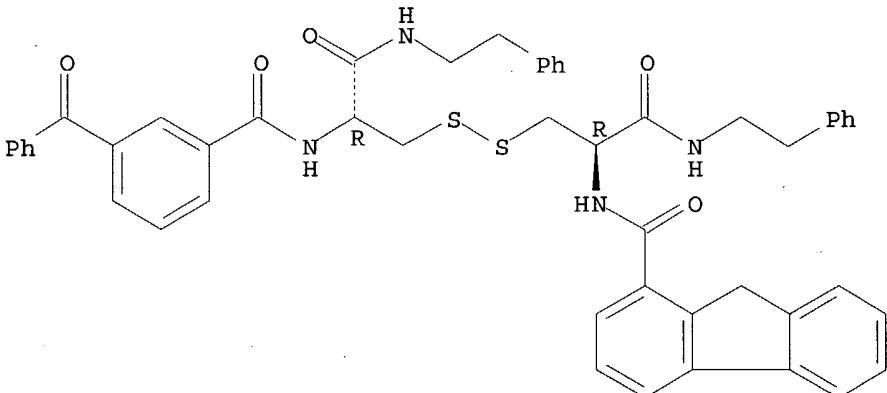
Absolute stereochemistry.



RN 269067-10-9 CAPPLUS

CN 9H-Fluorene-1-carboxamide, N-[(1R)-1-[[[(2R)-2-[(3-benzoylbenzoyl)amino]-3-oxo-3-[(2-phenylethyl)amino]propyl]dithio]methyl]-2-oxo-2-[(2-phenylethyl)amino]ethyl]- (9CI) (CA INDEX NAME)

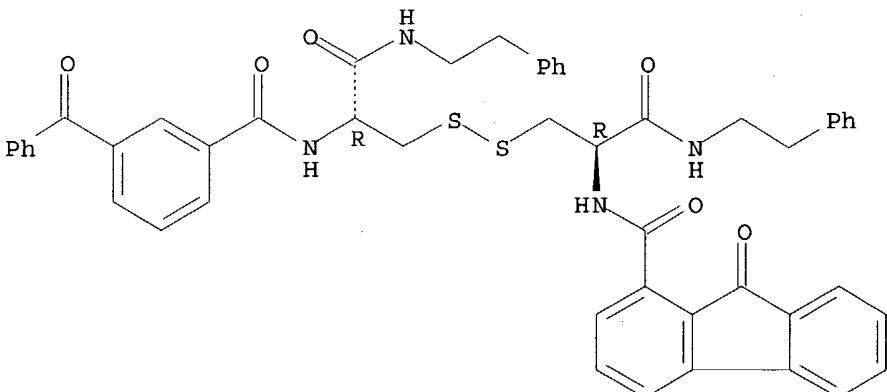
Absolute stereochemistry.



RN 269067-11-0 CAPPLUS

CN 9H-Fluorene-1-carboxamide, N-[(1R)-1-[[[(2R)-2-[(3-benzoylbenzoyl)amino]-3-oxo-3-[(2-phenylethyl)amino]propyl]dithio]methyl]-2-oxo-2-[(2-phenylethyl)amino]ethyl]-9-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



ACCESSION NUMBER: 2000:260225 CAPLUS

DOCUMENT NUMBER: 132:294010

TITLE: Preparation of diaminopropionic acid derivatives as intracellular adhesion molecule-1 (ICAM-1) binding inhibitors

INVENTOR(S): Fotouhi, Nader; Gillespie, Paul; Guthrie, Robert
William; Pietranico-Cole, Sherrie Lynn; Yun, Weiya

PATENT ASSIGNEE(S): F. Hoffmann-La Roche A.-G., Switz.

SOURCE: PCT Int. Appl., 259 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

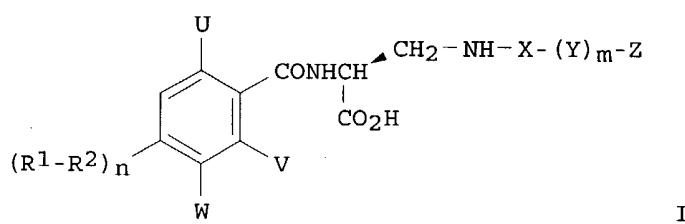
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-------------------|--------------|
| WO 2000021920 | A1 | 20000420 | WO 1999-EP7620 | 19991012 <-- |
| W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| US 6331640 | B1 | 20011218 | US 1999-407534 | 19990929 |
| CA 2344058 | AA | 20000420 | CA 1999-2344058 | 19991012 <-- |
| BR 9914602 | A | 20010703 | BR 1999-14602 | 19991012 |
| EP 1121342 | A1 | 20010808 | EP 1999-953772 | 19991012 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| TR 200101038 | T2 | 20010921 | TR 2001-200101038 | 19991012 |
| JP 2002527416 | T2 | 20020827 | JP 2000-575829 | 19991012 |
| AU 766468 | B2 | 20031016 | AU 2000-10349 | 19991012 |
| ZA 2001002608 | A | 20020930 | ZA 2001-2608 | 20010329 |
| US 2002052512 | A1 | 20020502 | US 2001-879700 | 20010612 |
| US 2004006236 | A1 | 20040108 | US 2003-349289 | 20030122 |
| US 6803384 | B2 | 20041012 | | |
| PRIORITY APPLN. INFO.: | | | | |
| | | | US 1998-104120P | P 19981013 |
| | | | US 1999-407534 | A3 19990929 |
| | | | WO 1999-EP7620 | W 19991012 |
| | | | US 2001-879700 | B3 20010612 |

OTHER SOURCE(S): MARPAT 132:294010

GI



AB Diaminopropionic acid derivs. I [R1 = substituted 1-naphthyl, 4-indolyl, 4-benzimidazolyl, 4-benzodiazolyl, 4-benzotriazolyl, or phenyl; R2 = CHR3NHCO (R3 = H, carboxy, alkyl), CH2CH2CO, 1,2-cyclopropanediylcarbonyl, OCH2CO, CH:CHCHR3, CH2CH2CH(OH), CONHCHR3, or CH2NH-5,1-tetrazolediyl; U, V, W = H, halo, alkyl provided that U and V are not both hydrogen; X = CO, phenylalkylene, sulfonyl; Y = alkylene which may be substituted by amino or cycloalkyl, alkenylene, alkylthio; Z = H, alkylthio, CO2H, CONH2, 1-adamantyl, diphenylmethyl, 3-[[5-chloro-2-pyridinyl]amino]carbonyl]-2-

pyrazinyl, hydroxy, phenylmethoxy, 2-chloro-4-[[[(3-hydroxyphenyl)methyl]amino]carbonyl]phenyl, [(2,6-dichlorophenyl)methoxy], Ph, (un)substituted cycloalkyl or aryl or fused ring system which may contain 0-3 heteroatoms; m, n = 0, 1] or their pharmaceutically acceptable salts or esters were prepared and are useful for **treating rheumatoid arthritis, psoriasis, multiple sclerosis, Crohn's disease, ulcerative colitis, atherosclerosis, restenosis, pancreatitis, transplant rejection, delayed graft function and diseases of ischemia reperfusion injury, including acute myocardial infarction and stroke.** Thus, N-[2-chloro-4-[[[(3-hydroxyphenyl)methyl]amino]carbonyl]benzoyl]-3-(3-methoxybenzoylamino)-L-alanine was prepared by the solid-phase method and showed IC50 = 1.2 nM in the LFA-1 (lymphocyte function-associated antigen-1)/ICAM-1 protein-protein assay.

IT

264273-81-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of diaminopropionic acid derivs. as intracellular adhesion mol.-1 (ICAM-1) binding inhibitors)

RN

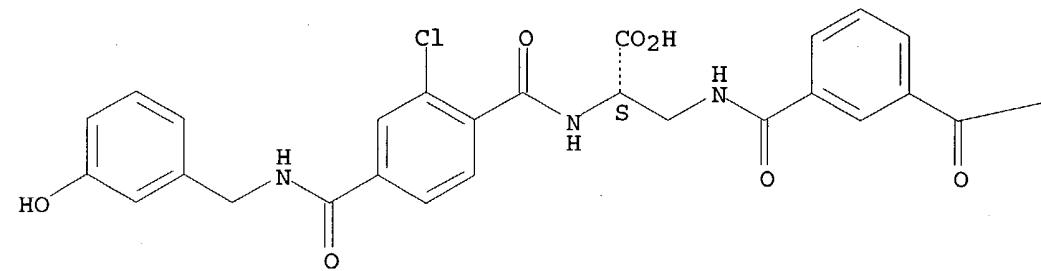
264273-81-6 CAPLUS

CN

Benzoic acid, 3-[[[(2S)-2-carboxy-2-[[2-chloro-4-[[[(3-hydroxyphenyl)methyl]amino]carbonyl]benzoyl]amino]ethyl]amino]carbonyl]-, 1-methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

—OMe

IT 264274-87-5P 264275-30-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of diaminopropionic acid derivs. as intracellular adhesion mol.-1 (ICAM-1) binding inhibitors)

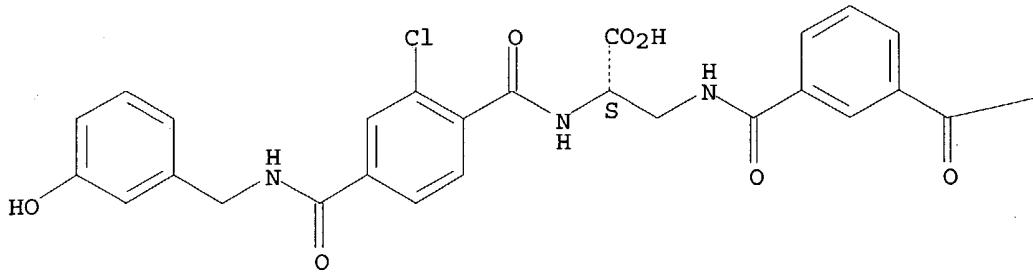
RN

264274-87-5 CAPLUS

CN

L-Alanine, 3-[[3-(aminocarbonyl)benzoyl]amino]-N-[2-chloro-4-[[[(3-hydroxyphenyl)methyl]amino]carbonyl]benzoyl]- (9CI) (CA INDEX NAME)

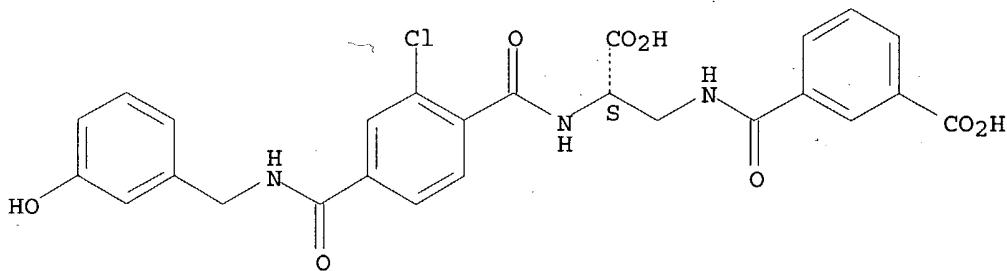
Absolute stereochemistry.

-NH₂

RN 264275-30-1 CAPLUS

CN Benzoic acid, 3-[[[(2S)-2-carboxy-2-[[2-chloro-4-[[[(3-hydroxyphenyl)methyl]amino]carbonyl]benzoyl]amino]ethyl]amino]carbonyl] - (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 7 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:98304 CAPLUS

DOCUMENT NUMBER: 132:151564

TITLE: Preparation of substituted anilides as modulators, agonists or antagonists of the CCR5 receptor

INVENTOR(S): Ku, Thomas W.; Bondinell, William E.; Neeb, Michael J.

PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA

SOURCE: PCT Int. Appl., 51 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

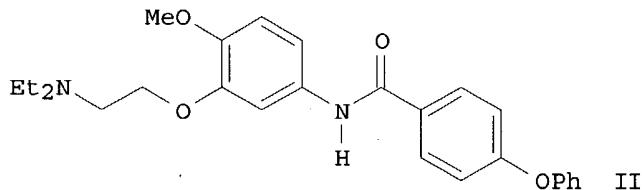
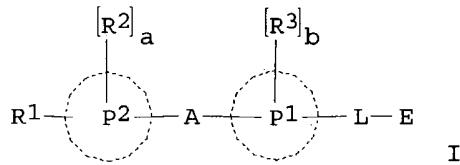
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|--------------|
| WO 2000006146 | A1 | 20000210 | WO 1999-US17121 | 19990728 <-- |
| W: AE, AL, AU, BA, BB, BG, BR, CA, CN, CZ, EE, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2338764 | AA | 20000210 | CA 1999-2338764 | 19990728 <-- |

| | | | |
|--|-------------|-------------------|--------------|
| AU 9952392 | A1 20000221 | AU 1999-52392 | 19990728 <-- |
| BR 9912406 | A 20010424 | BR 1999-12406 | 19990728 |
| EP 1100485 | A1 20010523 | EP 1999-937589 | 19990728 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | |
| TR 200100267 | T2 20010921 | TR 2001-200100267 | 19990728 |
| JP 2002521436 | T2 20020716 | JP 2000-562001 | 19990728 |
| NO 2001000446 | A 20010126 | NO 2001-446 | 20010126 |
| PRIORITY APPLN. INFO.: | | | |
| US 1998-94406P P 19980728 | | | |
| US 1999-134157P P 19990514 | | | |
| WO 1999-US17121 W 19990728 | | | |

OTHER SOURCE(S): MARPAT 132:151564

GI

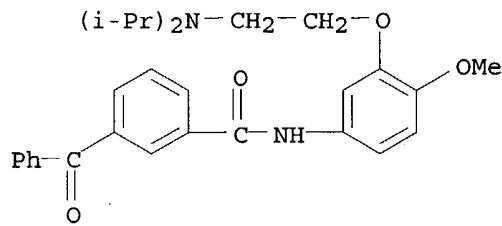


AB The title compds. [I; the basic N in moiety E may be optionally quaternized with alkyl or is optionally present as the N-oxide; P1, P2 = Ph, fused bicyclic aryl, monocyclic heterocyclyl, etc.; A = CO, O, SOC, etc.; L = CH2NH, NHCH2, etc.; R1, R2 = H, alkyl, alkenyl, etc.; R3 = H, alkyl, cycloalkyl, etc.; a, b = 1-3; c = 0-2] which are modulators, agonists or antagonists of the CCR5 receptor, and therefore useful in treating COPD, asthma and atopic disorders, **rheumatoid arthritis**, atherosclerosis, sarcoidosis and other fibrotic disease, psoriasis, autoimmune diseases such as multiple sclerosis, inflammatory bowel disease, and HIV, were prepared E.g., a synthesis of benzamide II starting with (4-formyl-3,5-dimethoxyphenoxy)-Merrifield resin and 3-[2-(diethylamino)ethoxy]-4-methoxyaniline, was given. Compds. I show CCR5 receptor modulator activity having IC50 values of 0.0001 to 100 μ M.

IT 257616-21-0P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (préparation of substituted anilides as modulators, agonists or antagonists of the CCR5 receptor)

RN 257616-21-0 CAPLUS

CN Benzamide, 3-benzoyl-N-[3-[2-[bis(1-methylethyl)amino]ethoxy]-4-methoxyphenyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 8 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1999:819241 CAPLUS

DOCUMENT NUMBER: 132:64530

TITLE: Preparation of diacyl hydrazine compds. as protease inhibitors

INVENTOR(S): Halbert, Stacie Marie; Michaud, Evelyn; Thompson, Scott Kevin; Veber, Daniel Frank

PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA

SOURCE: PCT Int. Appl., 167 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

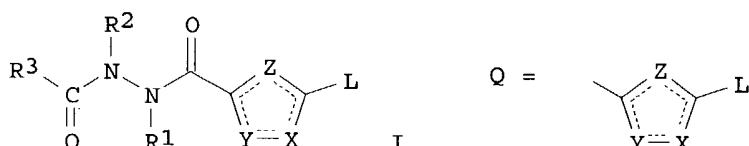
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|--------------|
| WO 9966925 | A1 | 19991229 | WO 1999-US14561 | 19990624 <-- |
| W: AE, AL, AU, BA, BB, BR, CA, CN, CZ, EE, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2335876 | AA | 19991229 | CA 1999-2335876 | 19990624 <-- |
| AU 9947237 | A1 | 20000110 | AU 1999-47237 | 19990624 <-- |
| EP 1093367 | A1 | 20010425 | EP 1999-930779 | 19990624 |
| R: BE, CH, DE, ES, FR, GB, IT, LI, NL | | | | |
| JP 2002518444 | T2 | 20020625 | JP 2000-555611 | 19990624 |
| PRIORITY APPLN. INFO.: | | | US 1998-90493P | P 19980624 |
| | | | WO 1999-US14561 | W 19990624 |

OTHER SOURCE(S): MARPAT 132:64530

GI



AB The present invention provides compds. I [L = C2-6 alkyl, Ar- or Het-C0-6 alkyl, CHR4NR5R6, CHR4Ar, CHR40Ar, NR4R7; X, Y, Z = N, O, S, CR10; R1, R2, R5, R10 = H, C1-6 alkyl, C2-6 alkenyl, Ar- or Het-C0-6 alkyl; R3 = C3-6 alkyl, Ar, Het, heterocycle Q, etc.; R4 = H, C1-6 alkyl, C2-6 alkenyl, C2-6 alkynyl, Ar- or Het-C0-6 alkyl, etc.; R6 = R14 or an acyl group such as R14CO, R14C(S), R14OCO (R14 = C1-6 alkyl, C2-6 alkenyl, Ar- or Het C0-6 alkyl); R7 = C1-6 alkyl, C1-6 alkenyl, C3-6 cycloalkyl-, Ar-, or Het-C0-6 alkyl], which inhibit proteases, including cathepsin K, pharmaceutical compns. of such compds., and methods for treating diseases of excessive bone loss or cartilage or matrix degradation, including osteoporosis, gingival disease, and arthritis. Thus, N-[2-[N-cyclopropyl-N-(cyclopropylmethyl)amino]thiazol-4-ylcarbonyl]-N'-(N-(6-methyl-3-

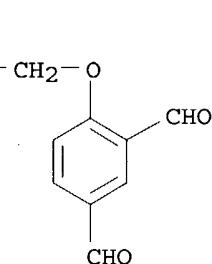
pyridinylmethoxycarbonyl)-L- β -tert-butylalanyl]hydrazide was prepared via sequential reactions of Et 6-nicotinate, L- β -tert-butylalanine, cyclopropylamine, cyclopropylcarboxaldehyde, benzoyl isothiocyanate, and Et bromopyruvate.

IT 250726-45-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of diacyl hydrazine compds. as protease inhibitors)

RN 250726-45-5 CAPLUS

CN Acetic acid, (2,4-diformylphenoxy)-, phenylmethyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 9 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1999:753240 CAPLUS

DOCUMENT NUMBER: 132:11677

TITLE: Isolation of physiologically active VD1207 substances having a neovascularization inhibitory effect from Streptomyces strain

INVENTOR(S): Wakabayashi, Toshiaki; Kawase, Rena; Naruse, Nobuaki; Fujita, Masanori; Sameshima, Tomohiro; Watanabe, Yoshio; Dobashi, Kazuyuki; Funahashi, Yasuhiro; Senba, Taro

PATENT ASSIGNEE(S): Mercian Corporation, Japan; Eisai Co., Ltd.

SOURCE: PCT Int. Appl., 51 pp.

DOCUMENT TYPE: CODEN: PIXXD2

LANGUAGE: Patent

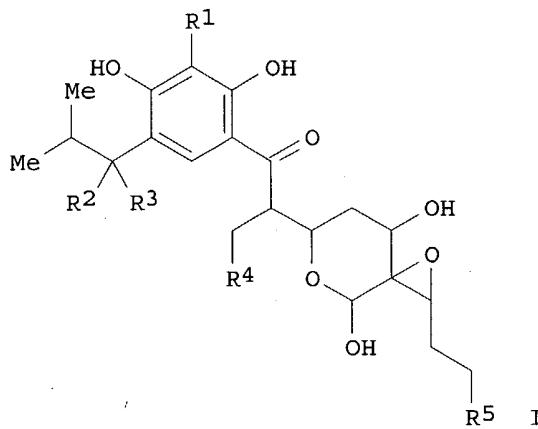
FAMILY ACC. NUM. COUNT: Japanese

PATENT INFORMATION: 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|--------------|
| WO 9960000 | A1 | 19991125 | WO 1999-JP2288 | 19990428 <-- |
| W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 9935386 | A1 | 19991206 | AU 1999-35386 | 19990428 <-- |
| EP 1081151 | A1 | 20010307 | EP 1999-917219 | 19990428 |
| R: DE, FR, GB | | | | |
| US 6645996 | B1 | 20031111 | US 2000-700680 | 20001117 |
| PRIORITY APPLN. INFO.: | | | JP 1998-135205 | A 19980518 |
| | | | WO 1999-JP2288 | W 19990428 |

OTHER SOURCE(S): MARPAT 132:11677

GI



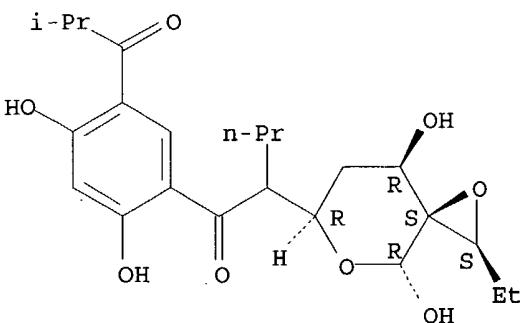
AB The title 6-(5-isobutyl-2,4-dihydroxyphenacyl)-4,8-dihydroxy-1,5-dioxaspiro[2.5]octane compds. represented by general formula (I; R1 represents hydrogen, aldehyde or lower acyl; R2 and R3 may be the same or different and each represents hydrogen or lower alkoxy, or R2 and R3 may represent together oxygen; R4 represents lower alkyl; and R5 represents hydrogen or lower alkyl, provided that the case where R1 is aldehyde, R2 and R3 are different from each other and represent hydrogen or methoxy, R4 is Et and R5 is hydrogen is excluded) or salts thereof are isolated from a liquid culture medium of a strain belonging to the genus *Streptomyces* and the structures are analyzed. Also claimed are drugs based on inhibiting the expression of adhesion mols. VCAM-1 or/and E-selectin containing I as the active ingredients. These compds. are useful for the **treatment** and prevention of **rheumatoid arthritis**, solid tumor, atherosclerosis, diabetic retinopathy, vascular tumors, and psoriasis. Thus, *Streptomyces* sp. VD1207 was aerobically cultured in a medium containing glycerol 2, glucose 2, soybean meal 2, yeast extract 0.5, NaCl 0.25, CaCO₃ 0.32, CuSO₄·5H₂O 0.0005, MnCl₂·4H₂O 0.0005, and ZnSO₄·7H₂O 0.0005% at 28° for 64 h (2 culture tanks each containing 100 L medium) and centrifuged to remove the bacteria followed by chromatog. separation using a Diaion HP-20 column, a YMC-GEL ODS-AM 120-S50 column and silica gel chromatog., HPLC separation, or thin layer chromatog. to give VD1207U1 [(+)-I; R1 = R5 = H, R2R3 = O, R4 = Et], VD1207U2 [(-)-I; R1 = R5 = H, R2R3 = O, R4 = Et], VD1207A1 [(+)-I; R1 = R5 = H, R2R3 = O, R4 = i-Pr], VD1207A2 [(-)-I; R1 = R5 = H, R2R3 = O, R4 = i-Pr], VD1207B [(-)-I; R1 = CHO; R2, R3 = OMe, H; R4 = Et, R5 = H], VD1207C [(+)-I; R1 = CHO; R2, R3 = OMe, H; R4 = Et, R5 = H], VD1207D [(-)-I; R1 = CHO, R2 = R3 = R5 = H, R4 = Et], VD1207E [(-)-I; R1 = CHO; R2, R3 = OMe, H; R4 = i-Pr, R5 = H], VD1207F [(+)-I; R1 = CHO; R2, R3 = OMe, H; R4 = i-Pr, R5 = H], VD1207F' [(+)-I; R1 = CHO; R2, R3 = OMe, H; R4 = n-Pr, R5 = H], VD1207G' [(-)-I; R1 = CHO, R2 = R3 = R5 = H, R4 = n-Pr], VD1207G1 [(-)-I; R1 = CHO, R2 = R3 = H, R4 = Et, R5 = Me], VD1207G2 [(+)-I; R1 = CHO, R2 = R3 = R5 = H, R4 = i-Pr], and VD1207H [(-)-I; R1 = COMe, R2 = R3 = R5 = H, R4 = Et]. In a neovascularization inhibitory assay, VD1207 A2, B, C, D, E, F, F', G1, G2, G', and H in vitro showed IC₅₀ of 1, 0.053, 0.050, 0.019, 0.047, 0.067, 0.10, 0.070, 0.034, 0.11, and 0.38 µg/mL, resp., for inhibiting the formation of capillary vessel in rat aorta cultured in collagen.

IT 251449-85-1P, VD 1207U1 251449-86-2P, VD 1207U2
 251449-87-3P, VD 1207A1 251449-88-4P, VD 1207A2
 RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses) (isolation of physiol. active VD1207 substances having neovascularization inhibitory effect from *Streptomyces* sp. VD1207)

RN 251449-85-1 CAPLUS
 CN 1-Pentanone, 1-[2,4-dihydroxy-5-(2-methyl-1-oxopropyl)phenyl]-2-[(2S,3S,4R,8R)-2-ethyl-4,8-dihydroxy-1,5-dioxaspiro[2.5]oct-6-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

Currently available stereo shown.

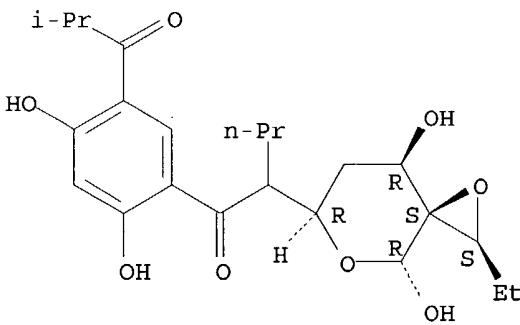


RN 251449-86-2 CAPLUS

CN 1-Pentanone, 1-[2,4-dihydroxy-5-(2-methyl-1-oxopropyl)phenyl]-2-[(2S,3S,4R,8R)-2-ethyl-4,8-dihydroxy-1,5-dioxaspiro[2.5]oct-6-yl]-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

Currently available stereo shown.

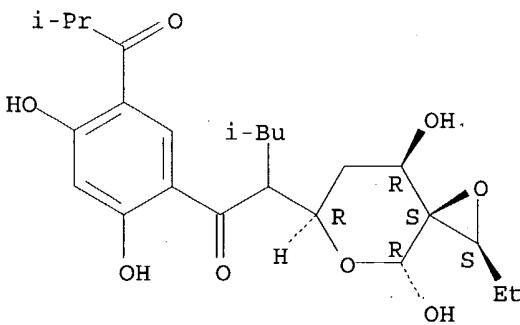


RN 251449-87-3 CAPLUS

CN 1-Pentanone, 1-[2,4-dihydroxy-5-(2-methyl-1-oxopropyl)phenyl]-2-[(2S,3S,4R,8R)-2-ethyl-4,8-dihydroxy-1,5-dioxaspiro[2.5]oct-6-yl]-4-methyl-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

Currently available stereo shown.

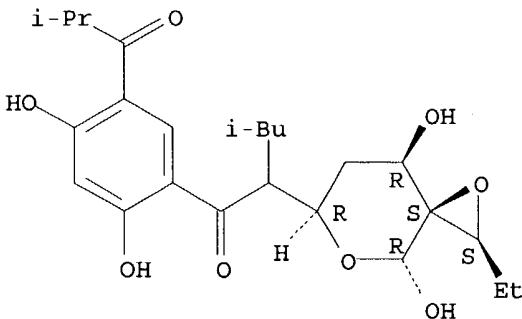


RN 251449-88-4 CAPLUS

CN 1-Pentanone, 1-[2,4-dihydroxy-5-(2-methyl-1-oxopropyl)phenyl]-2-[(2S,3S,4R,8R)-2-ethyl-4,8-dihydroxy-1,5-dioxaspiro[2.5]oct-6-yl]-4-methyl-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

Currently available stereo shown.



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 10 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1999:753058 CAPLUS

DOCUMENT NUMBER: 132:426

TITLE: Diacyl carbohydrazide compds. as protease inhibitors for **treating** diseases of excessive bone loss or cartilage or matrix degradation

INVENTOR(S): Halbert, Stacie Marie; Thompson, Scott Kevin; Veber, Daniel Frank

PATENT ASSIGNEE(S): SmithKline Beecham Corporation, USA

SOURCE: PCT Int. Appl., 74 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|--------------|
| WO 9959570 | A1 | 19991125 | WO 1998-US17275 | 19980820 <-- |
| W: AL, AU, BA, BB, BG, BR, CA, CN, CZ, EE, GE, HU, ID, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2332492 | AA | 19991125 | CA 1998-2332492 | 19980820 <-- |
| AU 9891102 | A1 | 19991206 | AU 1998-91102 | 19980820 <-- |
| EP 1079821 | A1 | 20010307 | EP 1998-943273 | 19980820 |
| R: BE, CH, DE, ES, FR, GB, IT, LI, NL | | | | |
| JP 2002515428 | T2 | 20020528 | JP 2000-549235 | 19980820 |
| PRIORITY APPLN. INFO.: | | | US 1998-86553P | P 19980521 |
| | | | WO 1998-US17275 | W 19980820 |

OTHER SOURCE(S): MARPAT 132:426

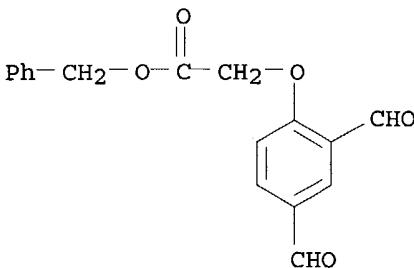
AB The present invention provides diacyl carbohydrazide compds., and pharmaceutically acceptable salts, hydrates and solvates thereof, which inhibit proteases, including cathepsin K, pharmaceutical compns. of such compds., novel intermediates of such compds., and methods for **treating** diseases of excessive bone loss or cartilage or matrix degradation, including osteoporosis; gingival disease including gingivitis and periodontitis; arthritis, more specifically, **osteoarthritis** and **rheumatoid arthritis**; Paget's disease; hypercalcemia of malignancy; and metabolic bone disease, comprising inhibiting said bone loss or excessive cartilage or matrix degradation by administering to a patient in need thereof a compound of the present invention.

IT 250726-45-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(diacyl carbohydrazide compds. as protease inhibitors for **treating** diseases of excessive bone loss or cartilage or matrix degradation)

RN 250726-45-5 CAPLUS

CN Acetic acid, (2,4-diformylphenoxy)-, phenylmethyl ester (9CI) (CA INDEX
NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 11 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1999:753019 CAPLUS

DOCUMENT NUMBER: 132:12506

TITLE: Preparation of peptides for **treating** diseases of excessive bone loss or cartilage or matrix degradation as cysteine protease inhibitors

INVENTOR(S): Bondinell, William Edward; Desjarlais, Renee Louise; Veber, Daniel Frank; Yamashita, Dennis Shinji

PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA

SOURCE: PCT Int. Appl., 128 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

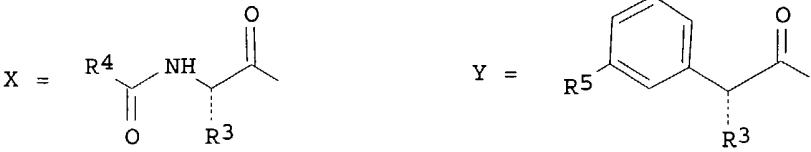
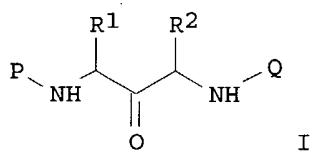
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|--------------|
| WO 9959526 | A2 | 19991125 | WO 1999-US11266 | 19990520 <-- |
| WO 9959526 | A3 | 20000120 | | |
| W: AE, AL, AU, BA, BB, BG, BR, CA, CN, CZ, EE, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2332531 | AA | 19991125 | CA 1999-2332531 | 19990520 <-- |
| EP 1067894 | A2 | 20010117 | EP 1999-924421 | 19990520 |
| R: BE, CH, DE, ES, FR, GB, IT, LI, NL | | | | |
| JP 2002515411 | T2 | 20020528 | JP 2000-549192 | 19990520 |
| US 6518267 | B1 | 20030211 | US 2000-700828 | 20001121 |
| PRIORITY APPLN. INFO.: | | | US 1998-86557P | P 19980521 |
| | | | WO 1999-US11266 | W 19990520 |

OTHER SOURCE(S): MARPAT 132:12506

GI



AB The present invention provides peptides bis-aminomethyl carbonyl protease inhibitors I (R1, R2 = alkyl; P = X, Y; R3 selected from the group consisting of: CH₂CH(CH₃)₂, CH₂CH₂CH₃, CH₂CH=CH₂, or CH₂Ph; R4 is selected from the group consisting of alkyl; N-piperazine; N-tetrahydroisoquinoline; substituted alkyl, Ph, benzofuran, benzothiazole; quinoline; naphthyl; and benzoxazole; R5 = Ph and Ph substituted with alkyl, N-piperidine, benzofuran; pyridine; Q = arylacyl) and pharmaceutically acceptable salts, hydrates and solvates thereof which inhibit proteases, including cathepsin K, pharmaceutical compns. of such compds., and methods for **treating** diseases of excessive bone loss or cartilage or matrix degradation, including osteoporosis; gingival disease including gingivitis and periodontitis; arthritis, more specifically, **osteoarthritis** and **rheumatoid arthritis**; Paget's disease; hypercalcemia of malignancy; and metabolic bone disease, comprising inhibiting said bone loss or excessive cartilage or matrix degradation by administering to a patient in need thereof a compound of the present invention. Thus, (S)-3N-(N-(thianaphthenyl-2-carbonyl)-leucinyl)-amino-1N-(3-{2-(1-oxo)-pyridyl}phenylacetyl)-amino-butan-2-one was prepared for **treating** diseases of excessive bone loss or cartilage or matrix degradation as cysteine protease inhibitor. Determination of cathepsin K proteolytic catalytic activity of these compds. are reported.

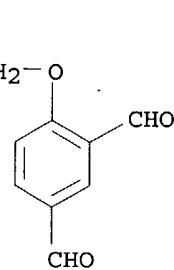
IT 250726-45-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of peptides for **treating** diseases of excessive bone loss or cartilage or matrix degradation as cysteine protease inhibitors)

RN 250726-45-5 CAPLUS

CN Acetic acid, (2,4-diformylphenoxy)-, phenylmethyl ester (9CI) (CA INDEX NAME)



L6 ANSWER 12 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1999:566043 CAPLUS

DOCUMENT NUMBER: 131:199620

TITLE: Preparation of indole derivatives as phospholipase enzyme inhibitors

INVENTOR(S): Seehra, Jasbir S.; Xiang, Yibin; Bemis, Jean; McKew, John; Kaila, Neelu; Chen, Lihren

PATENT ASSIGNEE(S): Genetics Institute, Inc., USA

SOURCE: PCT Int. Appl., 225 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

2

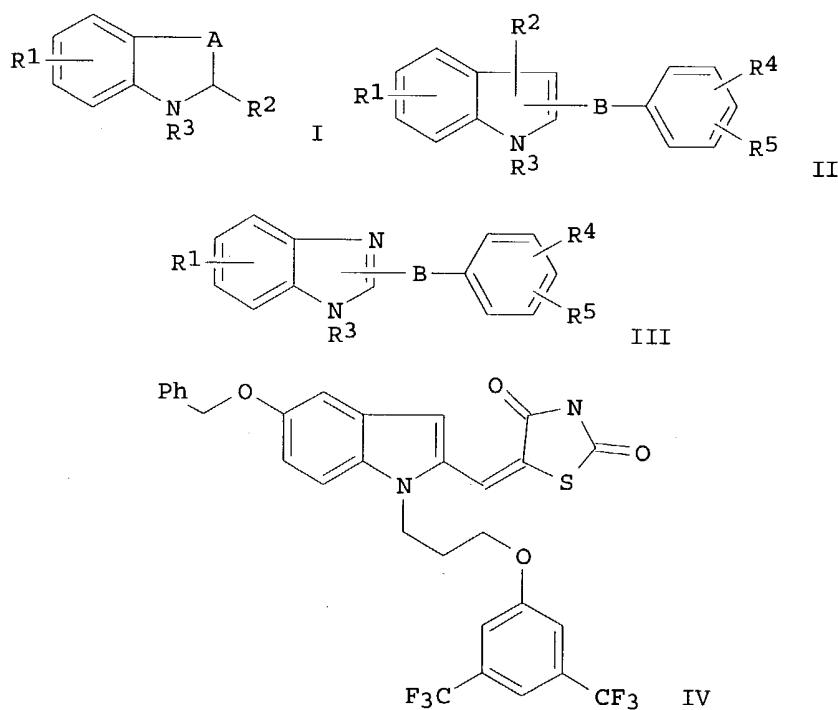
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-------------------|--------------|
| WO 9943672 | A1 | 19990902 | WO 1999-US3388 | 19990217 <-- |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2322163 | AA | 19990902 | CA 1999-2322163 | 19990217 <-- |
| AU 9932970 | A1 | 19990915 | AU 1999-32970 | 19990217 <-- |
| BR 9909242 | A | 20001114 | BR 1999-9242 | 19990217 <-- |
| TR 200002445 | T2 | 20001221 | TR 2000-200002445 | 19990217 <-- |
| EP 1062216 | A1 | 20001227 | EP 1999-936073 | 19990217 <-- |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI | | | | |
| JP 2002504551 | T2 | 20020212 | JP 2000-533428 | 19990217 |
| EE 200000522 | A | 20020215 | EE 2000-522 | 19990217 |
| HR 2000000513 | A1 | 20011231 | HR 2000-513 | 20000731 |
| NO 2000004217 | A | 20001023 | NO 2000-4217 | 20000823 <-- |
| BG 104781 | A | 20011031 | BG 2000-104781 | 20000919 |
| PRIORITY APPLN. INFO.: | | | US 1998-30102 | A 19980225 |
| | | | WO 1999-IS3388 | W 19990217 |
| | | | WO 1999-US3388 | W 19990217 |

OTHER SOURCE(S):

MARPAT 131:199620

GI



AB Indole derivs. (I), (II), and (III) [where A = CH₂ or CH₂CH₂; B = (CH₂)_n, (CH₂O)_n, (CH₂S)_n, (OCH₂)_n, (SCH₂)_n, (CH=CH)_n, (C.tplbond.C)_n, CON(R₆), N(R₆)CO, O, S, or N(R₆)]; R₁ and R₅ = independently H, OH, halogen, CN, NO₂, C₁₋₅ alkyl, alkenyl, alkynyl, or (un)substituted aryl, etc.; R₂ and

R3 = independently H, CO₂H, COR₅, CONR₅R₆, (CH₂)_nW(CH₂)_mZR₅, (CH₂)_nWR₅, ZR₅, C₁-10 alkyl, alkenyl, or substituted aryl; R₄ = H, OH, OR₆, SR₆, CN, COR₆, NHR₆, CO₂H, COR₆R₇, NO₂, (un)substituted sulfamidocarbonyl, C₁-5 alkyl, alkenyl, or substituted aryl; R₆, R₇ = H, C₁-5 alkyl, alkenyl, alkynyl, or (un)substituted aryl; W = O, S, CH₂, CH=CH, C.tpbond.C, or N(R₆); X = O, S, N(R₆); Z = CH₂, O, S, N(R₆), CO, CON(R₆), N(R₆)CO; m and n = independently 0-4] and pharmaceutically acceptable salts thereof, were prepared. Thus, 2,4-thiazolidinedione and K₂CO₃ followed by NaOH were added to 5-(benzyloxy)-1-(4-{[3,5-bis(trifluoromethyl)phenoxy]methyl}benzyl)-1H-indole-2-carboxaldehyde in EtOH to form the 2,4-thiazolidinedion-4-ylidene derivative. The ylidene was dissolved in a solution of DMF and NaH, reacted with an alkyl ester of 4-(bromomethyl)benzoic acid, and deesterified with HF to yield the acid, (E)-(IV). The title compds. are useful as phospholipase enzyme inhibitors, especially cytosolic phospholipase A₂ (cPLA₂), for treatment of inflammatory conditions, particularly where inhibition of production of prostaglandins, leukotrienes, and PAF are all desired. Eighty-seven compds. of the invention were tested for phospholipase enzyme inhibiting activity in the LysoPC and/or Coumarine assay. IC₅₀ values ranged from 0.081 μM to >50 μM for the LysoPC assay and from 2.5 μM to >64 μM for the Coumarine assay. Selected compds. were tested for in vivo activity in the carrageenan-induced rat paw edema test, and showed 4.2% to 34.2% inhibition. Forty-eight compds. of the invention were tested for cPLA₂ enzyme activity, and exhibited 25% to 95% inhibition at concns. of 3 μM to 100 μM.

IT

204017-40-3P 204017-41-4P 204017-42-5P

204017-63-0P 204017-64-1P 204017-65-2P

204017-75-4P 204017-76-5P 204017-77-6P

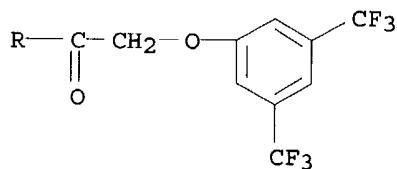
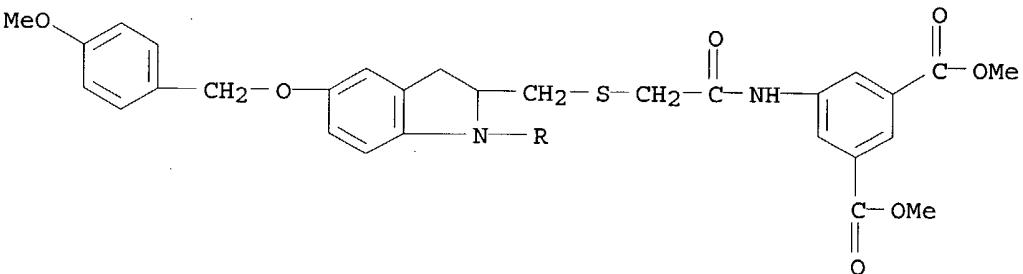
241490-04-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of indole derivs. as phospholipase enzyme inhibitors for treatment of inflammatory conditions)

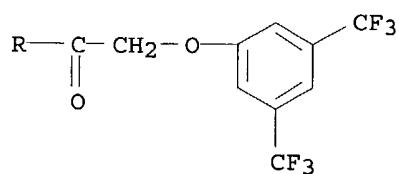
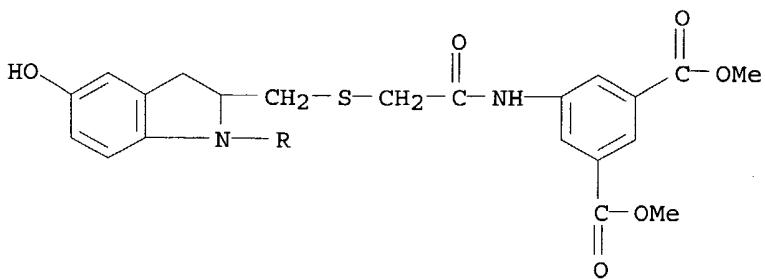
204017-40-3 CAPLUS

1,3-Benzene dicarboxylic acid, 5-[[[[[1-[[3,5-bis(trifluoromethyl)phenoxy]acetyl]-2,3-dihydro-5-[(4-methoxyphenyl)methoxy]-1H-indol-2-yl]methyl]thio]acetyl]amino] -, dimethyl ester (9CI) (CA INDEX NAME)



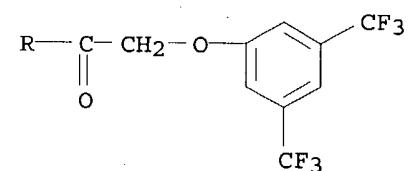
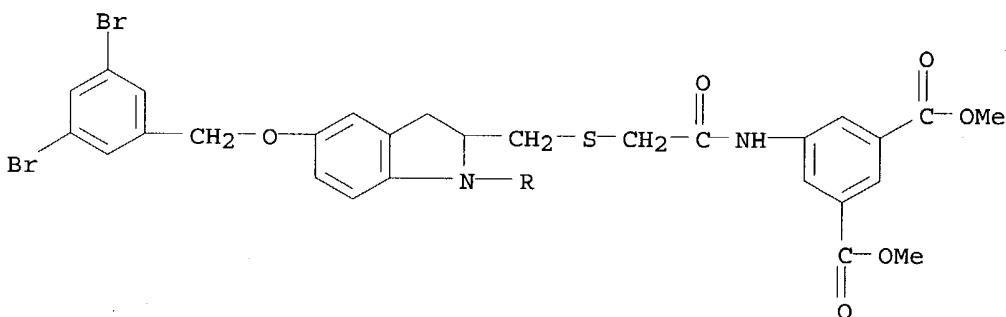
RN 204017-41-4 CAPLUS

CN 1,3-Benzene dicarboxylic acid, 5-[[[[[1-[[3,5-bis(trifluoromethyl)phenoxy]acetyl]-2,3-dihydro-5-hydroxy-1H-indol-2-yl]methyl]thio]acetyl]amino] -, dimethyl ester (9CI) (CA INDEX NAME)



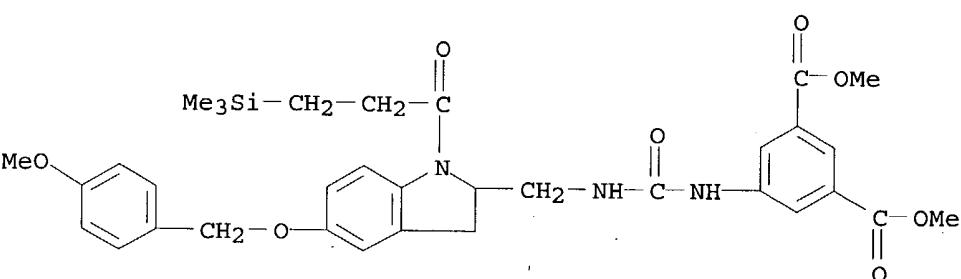
RN 204017-42-5 CAPLUS

CN 1,3-Benzenedicarboxylic acid, 5-[[[[[1-[[3,5-bis(trifluoromethyl)phenoxy]acetyl]-5-[(3,5-dibromophenyl)methoxy]-2,3-dihydro-1H-indol-2-yl]methyl]thio]acetyl]amino]-, dimethyl ester (9CI) (CA INDEX NAME)



RN 204017-63-0 CAPLUS

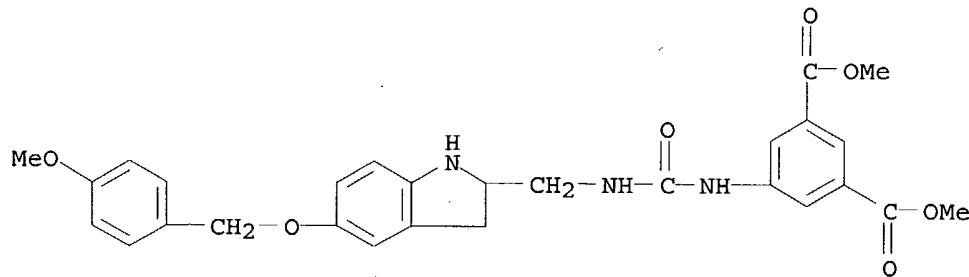
CN 1,3-Benzenedicarboxylic acid, 5-[[[[[2,3-dihydro-5-[(4-methoxyphenyl)methoxy]-1-[1-oxo-3-(trimethylsilyl)propyl]-1H-indol-2-yl]methyl]amino]carbonyl]amino]-, dimethyl ester (9CI) (CA INDEX NAME)



RN 204017-64-1 CAPLUS

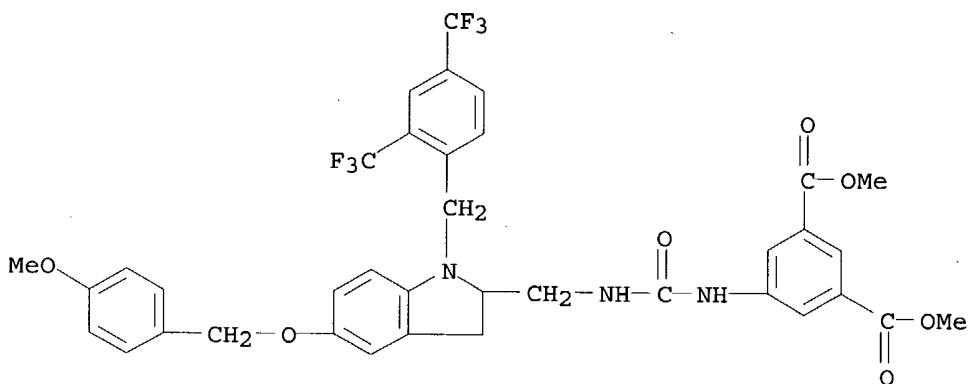
CN 1,3-Benzenedicarboxylic acid, 5-[[[[[2,3-dihydro-5-[(4-

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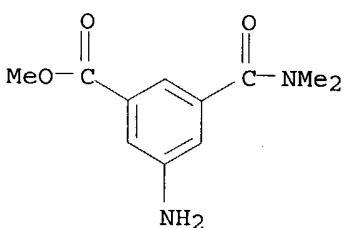
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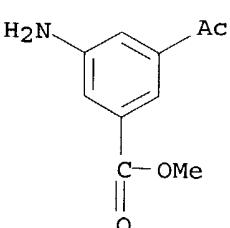
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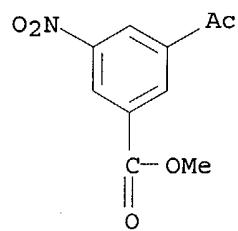
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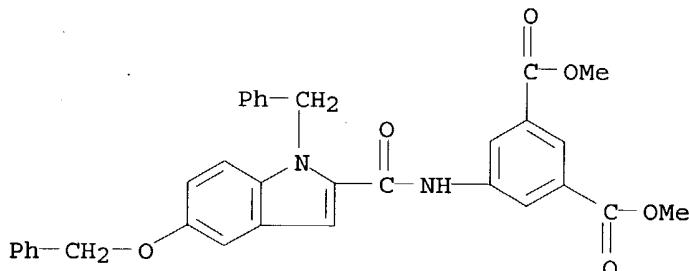
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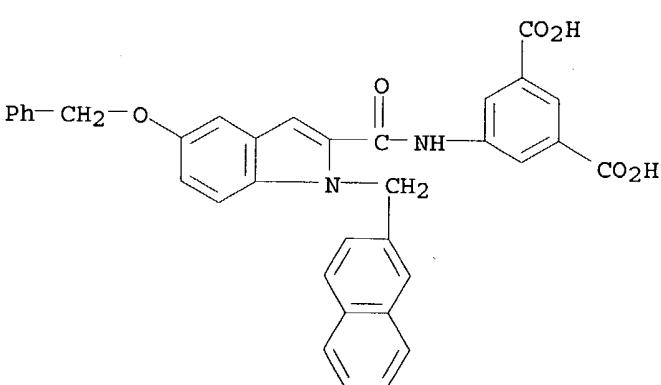
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RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of indole derivs. as phospholipase enzyme inhibitors for treatment of inflammatory conditions)

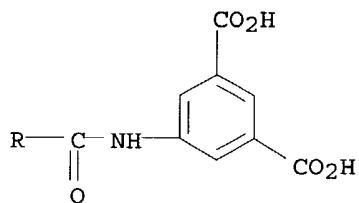
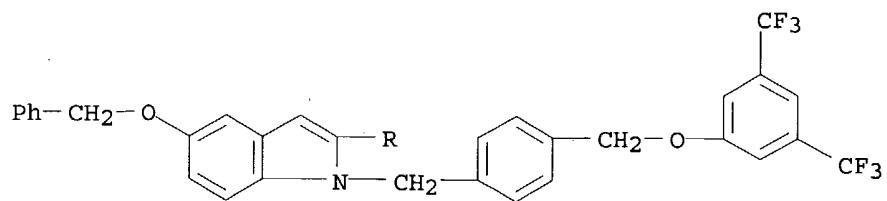
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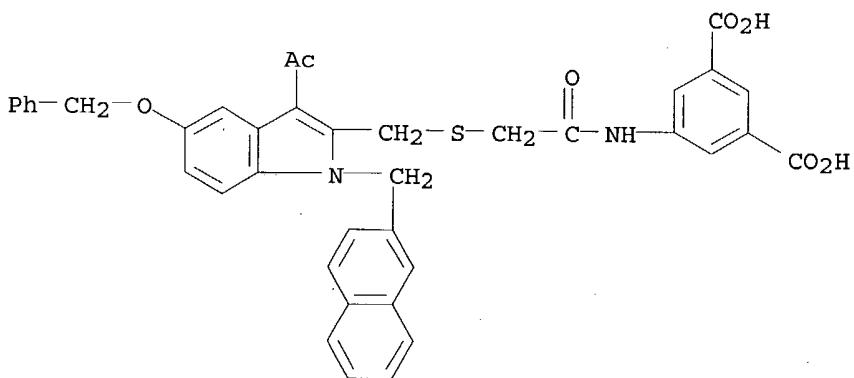
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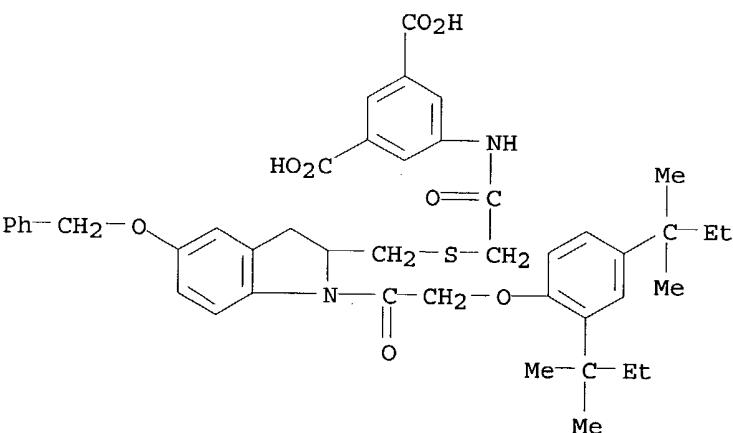
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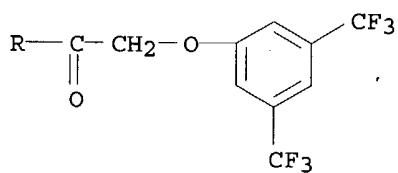
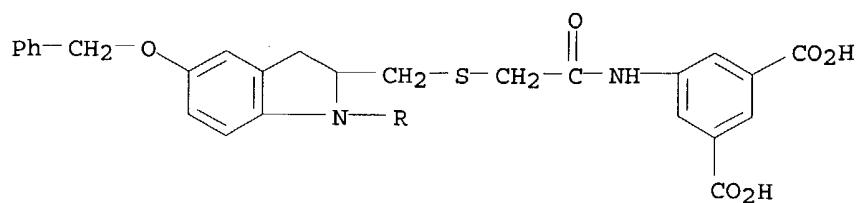
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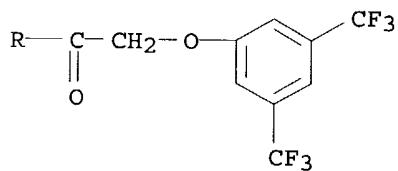
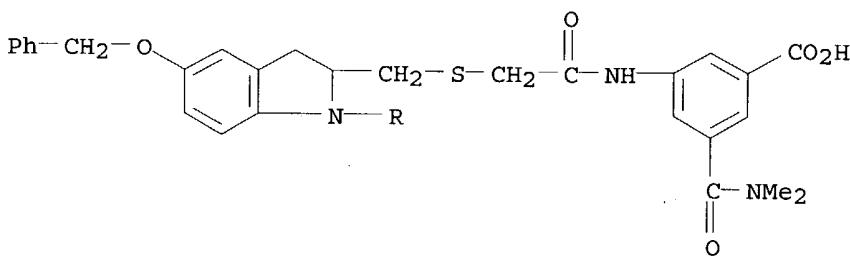
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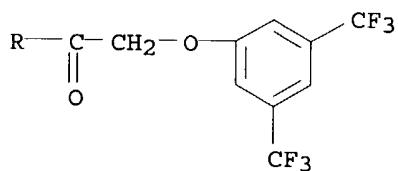
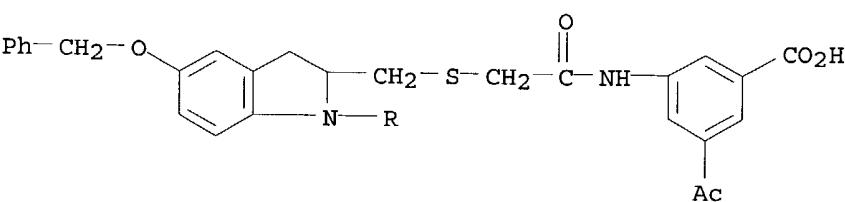
RN 204016-65-9 CAPLUS

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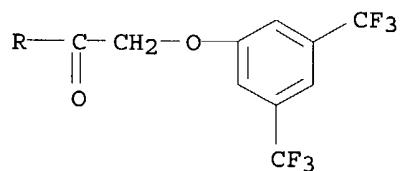
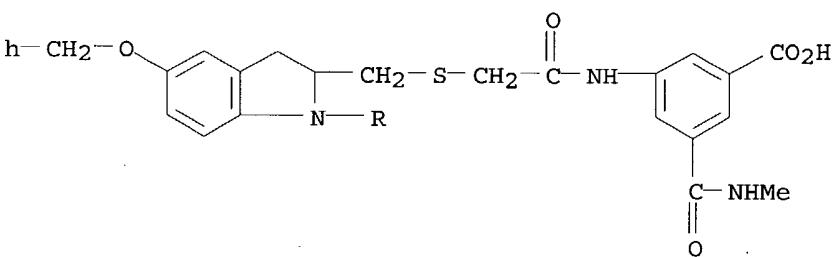
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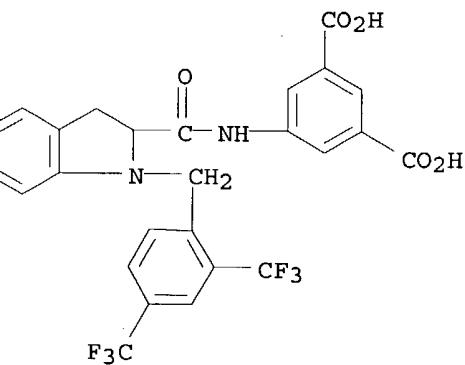
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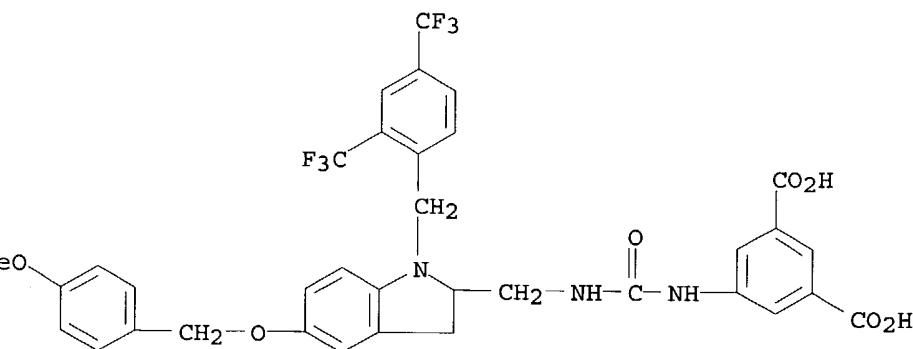
N 204017-09-4 CAPLUS

N 1,3-Benzeneddicarboxylic acid, 5-[[[[1-[[2,4-bis(trifluoromethyl)phenyl]methy1]-2,3-dihydro-1H-indol-2-yl]carbonyl]amino]- (9CI) (CA INDEX NAME)



N 204017-12-9 CAPLUS

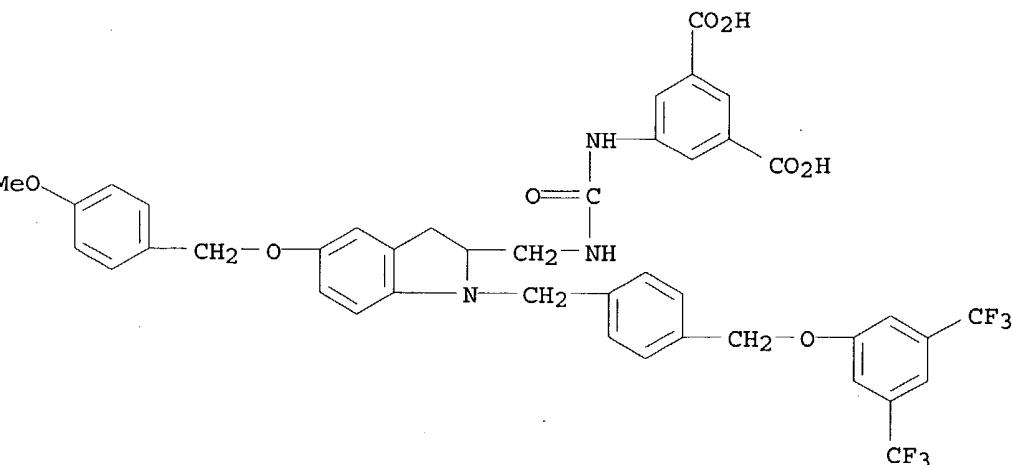
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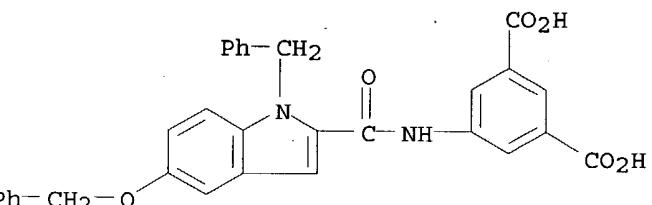
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(CA INDEX NAME)



RN 241489-80-5 CAPLUS
CN 1,3-Benzenedicarboxylic acid, 5-[[[5-(phenylmethoxy)-1-(phenylmethyl)-1H-indol-2-yl]carbonyl]amino]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

6 ANSWER 13 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1999:566026 CAPLUS
DOCUMENT NUMBER: 131:199619
TITLE: Preparation of indole derivatives as phospholipase enzyme inhibitors
INVENTOR(S): Seehra, Jasbir S.; Mckew, John C.; Lovering, Frank; Bemis, Jean E.; Xiang, Yibin; Chen, Lihren; Knopf, John L.
ATTEN ASSIGNEE(S): Genetics Institute, Inc., USA
OURCE: PCT Int. Appl., 182 pp.
OCUMENT TYPE: Patent
ANGUAGE: English
AMILY ACC. NUM. COUNT: 1
ATTEN INFORMATION:

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| RW: | GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, | | | |

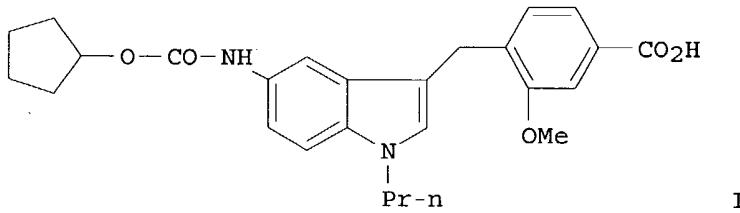
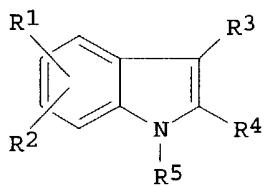
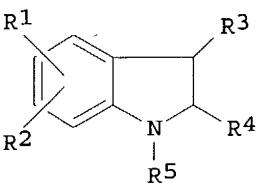
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| NZ 506329 | A | 20040130 | NZ 1999-506329 | 19990224 |
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| BG 104779 | A | 20011031 | BG 2000-104779 | 20000919 |
| | | | US 1998-30592 | A 19980225 |
| | | | WO 1999-US3898 | W 19990224 |

PRIORITY APPLN. INFO.:

MARPAT 131:199619

GI



AB Indole derivs. (I) and (II) [where R1 = H, halogen, CF3, C1-10 alkyl, S-C1-10 alkyl, C1-10 alkoxy, CN, NO2, NH2, Ph, OPh, SPh, CH2Ph, OCH2Ph, SCH2Ph, or (un)substituted amido, carbamido, sulfonyl, etc.; R2 = H, halogen, CF3, OH, C1-10 alkyl, C1-10 alkoxy, CHO, CN, NO2, (un)substituted amino, SO2-C1-6 alkyl; R3 = (un)substituted carboxylic acid, OPO3H2, SO3H, etc.; R4 = H, CF3, C1-6 alkyl, C1-6 alkoxy, (C1-6 alkyl)cycloalkyl, CHO, halogen, etc.; R5 = C1-6 alkyl, C1-6 alkoxy, (C1-6 alkyl)cycloalkyl, etc.] and pharmaceutically acceptable salts thereof, were prepared by several methods. Thus, 5-nitroindole was C3-alkylated with Me 4-(bromomethyl)-3-methoxybenzoate in dioxane, N-alkylated with 1-iodopropane in a solution of THF and NaH, and converted to the amine by hydrogenation over Pt/C. The amine was converted to the carbamate by addition of cyclopentyl chloroformate in CH2Cl2 and 4-methylmorpholine and the resultant ester hydrolyzed to yield 4-[(5-[(cyclopentyloxy)carbonyl]amino)-1-propyl-1H-indol-3-yl)methyl]-3-methoxybenzoic acid (III). The title compds. are useful as phospholipase enzyme inhibitors, especially cytosolic phospholipase A2 (cPLA2), for treatment of inflammatory conditions, particularly where inhibition of production of prostaglandins, leukotrienes, and PAF are all desired. Over one hundred compds. of the invention were tested for cPLA2 inhibiting activity in the Coumarine assay and rat carrageenan-induced footpad edema test. Compds. exhibited 7% to 98% inhibition at concns. of 0.125 μ M to 400 μ M in the Coumarine assay and -7.16% to 34.52% inhibition at concns. of 2 μ M to 20 μ M in the footpad edema test.

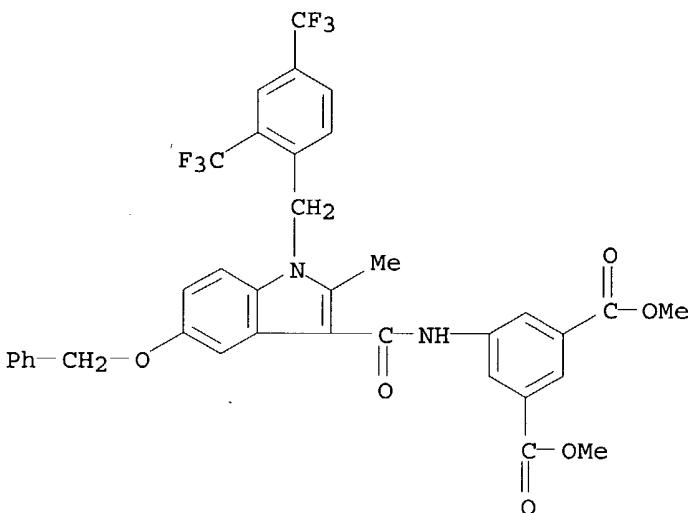
IT 241498-37-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of indole derivs. as phospholipase enzyme inhibitors for treatment of inflammatory conditions)

RN 241498-37-3 CAPLUS

CN 1,3-Benzenedicarboxylic acid, 5-[[1-[[2,4-bis(trifluoromethyl)phenyl]methy1]-2-methyl-5-(phenylmethoxy)-1H-indol-3-yl]carbonyl]amino]-, dimethyl ester (9CI) (CA INDEX NAME)

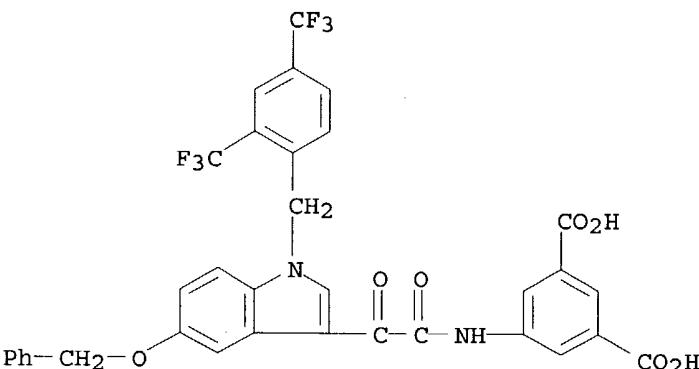


IT 241497-45-0P 241497-83-6P 241497-85-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of indole derivs. as phospholipase enzyme inhibitors for treatment of inflammatory conditions)

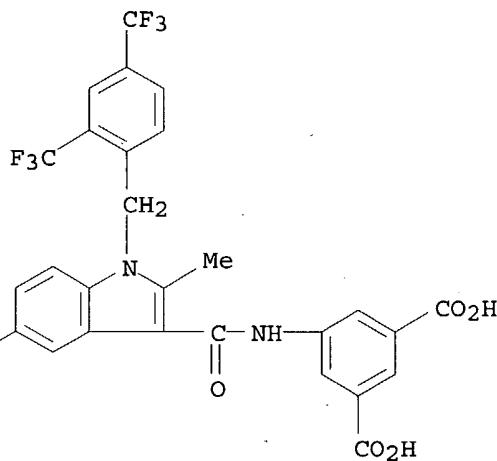
RN 241497-45-0 CAPLUS

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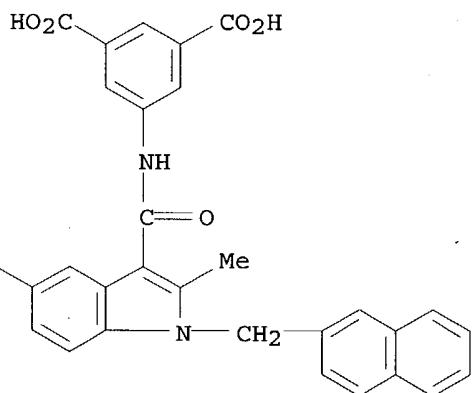
RN 241497-83-6 CAPLUS

CN 1,3-Benzenedicarboxylic acid, 5-[[1-[[2,4-bis(trifluoromethyl)phenyl]methy1]-2-methyl-5-(phenylmethoxy)-1H-indol-3-yl]carbonyl]amino]- (9CI) (CA INDEX NAME)



RN 241497-85-8 CAPLUS

CN 1,3-Benzenedicarboxylic acid, 5-[[[2-methyl-1-(2-naphthalenylmethyl)-5-(phenylmethoxy)-1H-indol-3-yl]carbonyl]amino]- (9CI) (CA INDEX NAME)



L6 ANSWER 14 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1999:566023 CAPLUS

DOCUMENT NUMBER:

131:199618

TITLE:

Preparation of indole derivatives as phospholipase enzyme inhibitors

INVENTOR(S):

Seehra, Jasbir S.; Kaila, Neelu; McKew, John C.; Lovering, Frank; Bemis, Jean E.; Xiang, Yibin

PATENT ASSIGNEE(S):

Genetics Institute, Inc., USA

SOURCE:

PCT Int. Appl., 128 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

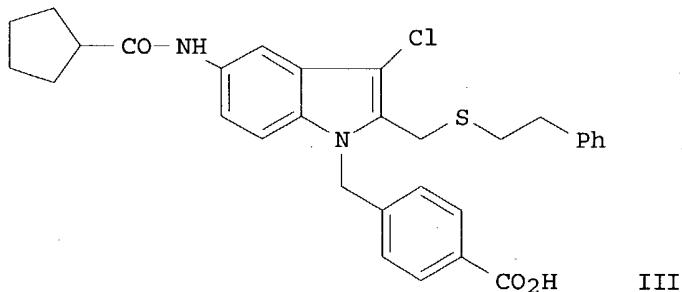
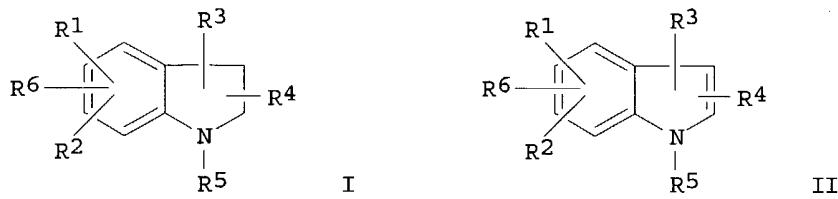
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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| JP 2002504539 | T2 | 20020212 | JP 2000-533409 | 19990224 |
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| US 1998-30062 A 19980225 | | | | |
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| US 1999-256413 B2 19990224 | | | | |
| WO 1999-US3899 W 19990224 | | | | |
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OTHER SOURCE(S): MARPAT 131:199618
GI



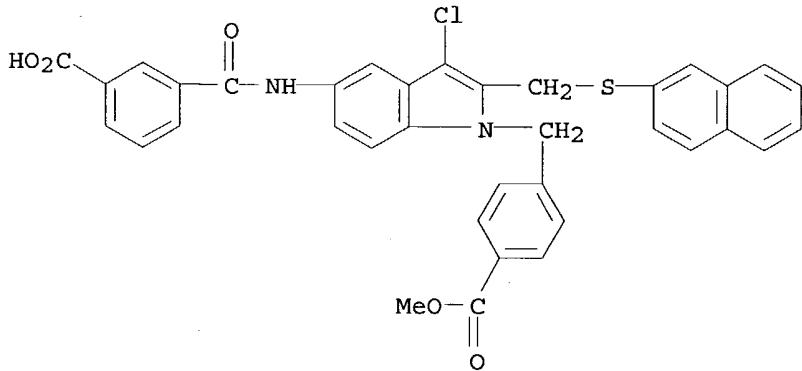
AB Indole derivs. (I) and (II) [where R1 and R6 = H, halogen, CF₃, OH, C1-10 alkyl, S-C1-10 alkyl, C1-10 alkoxy, CN, NO₂, Ph, OPh, SPh, CH₂Ph, OCH₂Ph, SCH₂Ph, or (un)substituted amino, amido, carbamido, sulfonyl, etc.; R2 = H, halogen, CF₃, OH, C1-10 alkyl, C1-10 alkoxy, CHO, CN, NO₂, (un)substituted amino, SO₂-C1-6 alkyl; R3 = H, CF₃, C1-6 alkyl, C1-6 alkoxy, (C1-6 alkyl)cycloalkyl, etc.; R4 = C1-6 alkyl, C1-6 alkoxy, alkylcycloalkyl, acyl, etc.; R5 = (un)substituted carboxylic acid, OPO₃H₂, SO₃H, etc.] and pharmaceutically acceptable salts thereof, were prepared by several methods. Thus, Et 5-nitroindole-2-carboxylate was C3-chlorinated in DMF. The alc. was formed by reduction of the ester in a two-step process and was then TBDSMS-protected. The TBDSMS-protected alc. was N-alkylated with Me 4-(bromomethyl)benzoate, the nitro group reduced to the amine over Pt/C, and the compound reacted with cyclopentylcarbonyl chloride to form the amide. The amide was treated with Ph₃PBr₂ in CH₂Cl₂ to convert the protected alc. to the bromide and then reacted with phenethyl mercaptan in the presence of Cs₂CO₃ followed by NaOH to yield 4-((3-chloro-5-[(cyclopentylcarbonyl)amino]-2-[(phenethylsulfanyl)methyl]-1H-indol-1-yl)methyl)benzoic acid (III). The title compds. are useful as phospholipase enzyme inhibitors, especially cytosolic phospholipase A2 (cPLA₂), for treatment of inflammatory conditions, particularly where inhibition of production of prostaglandins, leukotrienes, and PAF are all desired (no data).

IT 241493-73-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of indole derivs. as phospholipase enzyme inhibitors for **treatment** of inflammatory conditions)

RN 241493-73-2 CAPLUS

CN Benzoic acid, 4-[[5-[(3-carboxybenzoyl)amino]-3-chloro-2-[(2-naphthalenylthio)methyl]-1H-indol-1-yl]methyl]-, 1-methyl ester (9CI) (CA INDEX NAME)

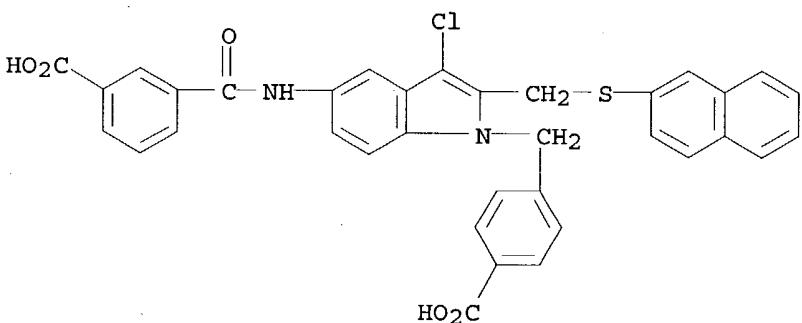


IT 241492-78-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of indole derivs. as phospholipase enzyme inhibitors for **treatment** of inflammatory conditions)

RN 241492-78-4 CAPLUS

CN Benzoic acid, 3-[[[1-[(4-carboxyphenyl)methyl]-3-chloro-2-[(2-naphthalenylthio)methyl]-1H-indol-5-yl]amino]carbonyl]- (9CI) (CA INDEX NAME)



L6 ANSWER 15 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1999:350650 CAPLUS

DOCUMENT NUMBER: 131:18925

TITLE: Preparation of cyclic amine derivatives for inhibition of the action of chemokines such as MIP-1 α and/or MCP-1 on target cells

INVENTOR(S): Shiota, Tatsuki; Kataoka, Kenichiro; Imai, Minoru; Tsutsumi, Takaharu; Sudoh, Masaki; Sogawa, Ryo; Morita, Takuya; Hada, Takahiko; Muroga, Yumiko; Takenouchi, Osami; Furuya, Monoru; Endo, Noriaki; Tarby, Christine M.; Moree, Wil A.; Teig, Steven L.

PATENT ASSIGNEE(S): Teijin Ltd., Japan; Combichem, Inc.

SOURCE: PCT Int. Appl., 374 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

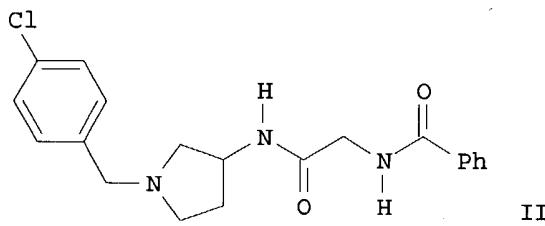
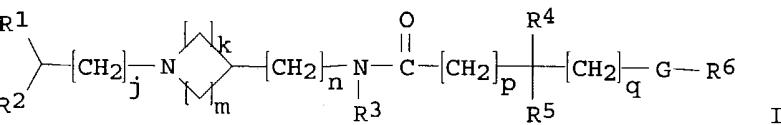
FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-------------------|--------------|
| WO 9925686 | A1 | 19990527 | WO 1998-US23254 | 19981117 <-- |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, US, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2309328 | AA | 19990527 | CA 1998-2309328 | 19981117 <-- |
| AU 9913741 | A1 | 19990607 | AU 1999-13741 | 19981117 <-- |
| AU 744685 | B2 | 20020228 | | |
| EP 1030840 | A1 | 20000830 | EP 1998-957495 | 19981117 <-- |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| TR 200001399 | T2 | 20001121 | TR 2000-200001399 | 19981117 <-- |
| BR 9814645 | A | 20010731 | BR 1998-14645 | 19981117 |
| EE 200000294 | A | 20010815 | EE 2000-200000294 | 19981117 |
| JP 2001523661 | T2 | 20011127 | JP 2000-521070 | 19981117 |
| RU 2216540 | C2 | 20031120 | RU 2000-112403 | 19981117 |
| HR 2000000214 | A1 | 20011231 | HR 2000-214 | 20000413 |
| NO 2000002486 | A | 20000718 | NO 2000-2486 | 20000512 <-- |
| BG 104441 | A | 20010131 | BG 2000-104441 | 20000516 |
| US 6451842 | B1 | 20020917 | US 2000-554562 | 20000516 |
| PRIORITY APPLN. INFO.: | | | US 1997-972484 | A 19971118 |
| | | | US 1998-55285 | A 19980406 |
| | | | US 1998-133434 | A 19980813 |
| | | | WO 1998-US23254 | W 19981117 |

OTHER SOURCE(S): MARPAT 131:18925

GI



AB The title compds. [I; R1 = (un)substituted Ph, cycloalkyl, heteroaryl, etc.; R2 = H, alkyl, alkoxy carbonyl, etc.; j = 0-2; k = 0-2; m = 2-4; n = 0-1; R3 = H, alkyl; R4, R5 = H, OH< Ph, etc.; p = 0-1; q = 0-1; G = CO, SO, CO2, etc.; R6 = Ph, cycloalkyl, cycloalkenyl, etc.] and their pharmaceutically acceptable acid addition salts which inhibit the action of chemokines such as MIP-1 α and/or MCP-1 on target cells and may be useful as a therapeutic drug and/or preventative drug in diseases, such as atherosclerosis, **rheumatoid arthritis**, and the like where blood monocytes and lymphocytes infiltrate into tissues, were prepared. Thus, reaction of N-benzoylglycine with 3-amino-1-[4-chlorobenzyl]pyrrolidine.2HCl in the presence of 3-ethyl-1-[3-(dimethylaminopropyl)]carbodiimide.HCl, 1-hydroxybenzotriazole and Et3N in CHCl3 afforded 95% II which showed 50-80% inhibition of MIP-1 α binding to THP-1 cells at 10 μ M.

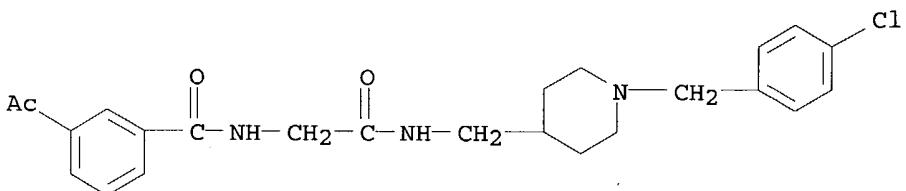
226231-26-1P 226232-13-9P 226232-44-6P

226232-66-2P 226232-70-8P 226233-28-9P
 226233-64-3P 226233-91-6P 226241-34-5P
 226241-35-6P 226241-39-0P 226241-41-4P
 226250-69-7P 226250-73-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of cyclic amine derivs. for inhibition of the action of chemokines such as MIP-1 α and/or MCP-1 on target cells)

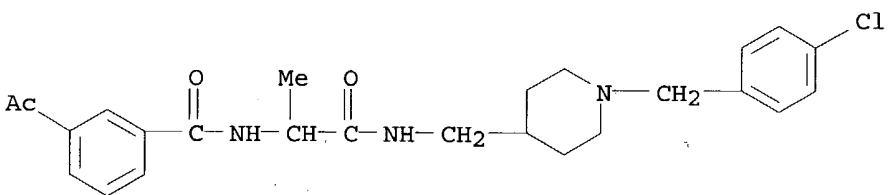
RN 226231-26-1 CAPLUS

CN Benzamide, 3-acetyl-N-[2-[[1-[(4-chlorophenyl)methyl]-4-piperidinyl]methyl]amino]-2-oxoethyl]- (9CI) (CA INDEX NAME)



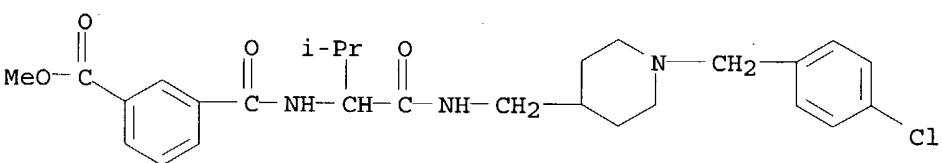
RN 226232-13-9 CAPLUS

CN Benzamide, 3-acetyl-N-[2-[[1-[(4-chlorophenyl)methyl]-4-piperidinyl]methyl]amino]-1-methyl-2-oxoethyl]- (9CI) (CA INDEX NAME)



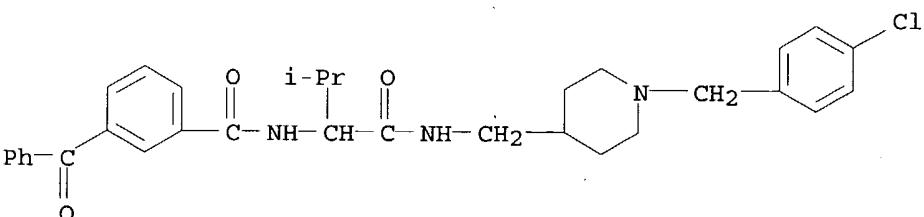
RN 226232-44-6 CAPLUS

CN Benzoic acid, 3-[[1-[[[1-[(4-chlorophenyl)methyl]-4-piperidinyl]methyl]amino]carbonyl]-2-methylpropyl]amino]carbonyl]-, methyl ester (9CI) (CA INDEX NAME)



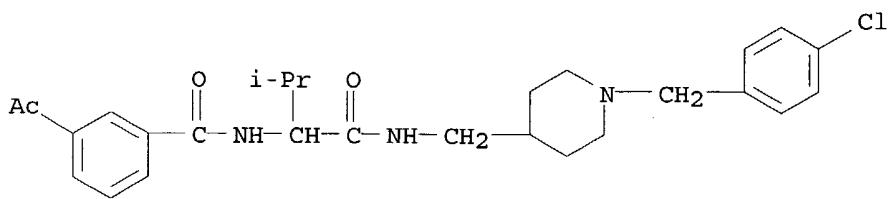
RN 226232-66-2 CAPLUS

CN Benzamide, 3-benzoyl-N-[1-[[[1-[(4-chlorophenyl)methyl]-4-piperidinyl]methyl]amino]carbonyl]-2-methylpropyl]- (9CI) (CA INDEX NAME)

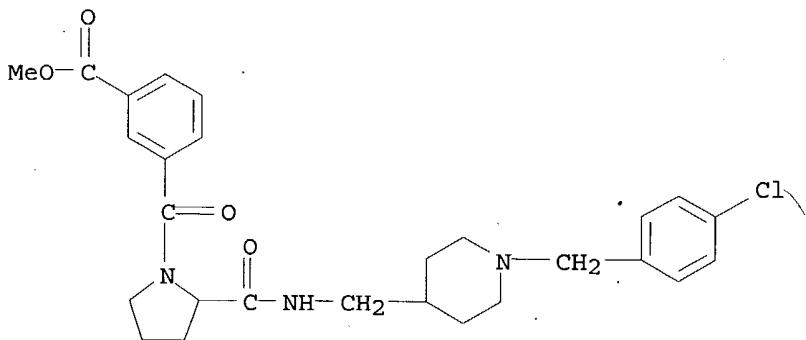


RN 226232-70-8 CAPLUS

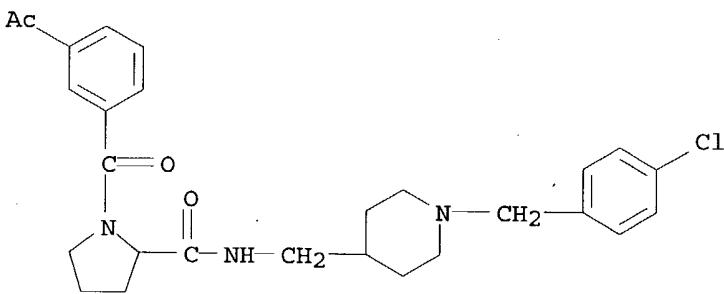
CN Benzamide, 3-acetyl-N-[1-[[[1-[(4-chlorophenyl)methyl]-4-piperidinyl]methyl]amino]carbonyl]-2-methylpropyl]- (9CI) (CA INDEX NAME)



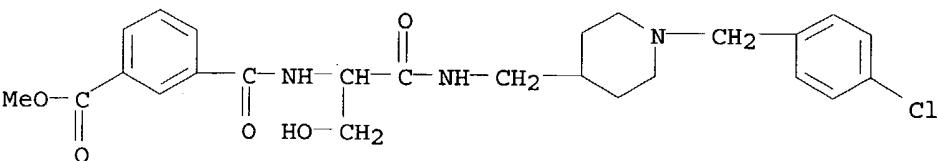
RN 226233-28-9 CAPLUS
 CN Benzoic acid, 3-[[2-[[[[1-[(4-chlorophenyl)methyl]-4-piperidinyl]methyl]amino]carbonyl]-1-pyrrolidinyl]carbonyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 226233-64-3 CAPLUS
 CN 2-Pyrrolidinecarboxamide, 1-(3-acetylbenzoyl)-N-[[1-[(4-chlorophenyl)methyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

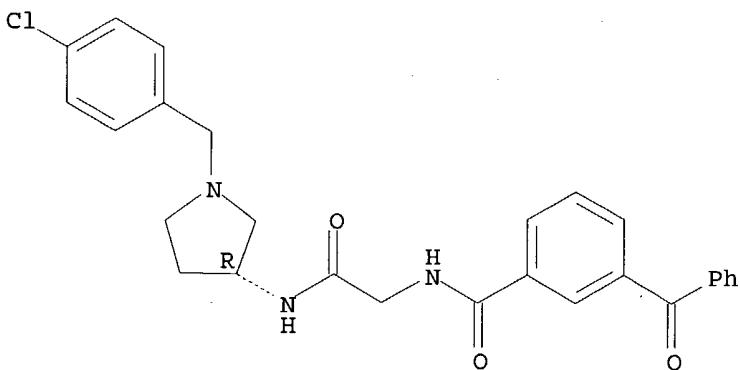


RN 226233-91-6 CAPLUS
 CN Benzoic acid, 3-[[2-[[1-[(4-chlorophenyl)methyl]-4-piperidinyl]methyl]amino]-1-(hydroxymethyl)-2-oxoethyl]amino]carbonyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 226241-34-5 CAPLUS
 CN Benzamide, 3-benzoyl-N-[2-[(3R)-1-[(4-chlorophenyl)methyl]-3-pyrrolidinyl]amino]-2-oxoethyl]- (9CI) (CA INDEX NAME)

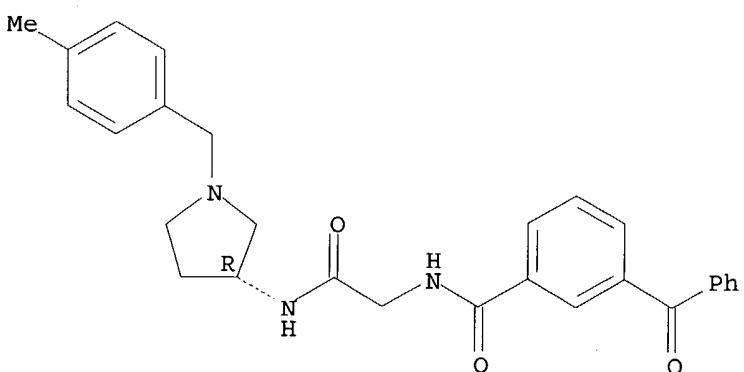
Absolute stereochemistry.



RN 226241-35-6 CAPLUS

CN Benzamide, 3-benzoyl-N-[2-[(3R)-1-[(4-methylphenyl)methyl]-3-pyrrolidinyl]amino]-2-oxoethyl] - (9CI) (CA INDEX NAME)

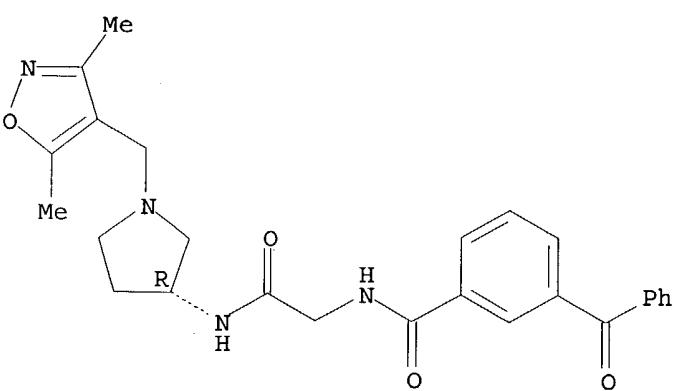
Absolute stereochemistry.



RN 226241-39-0 CAPLUS

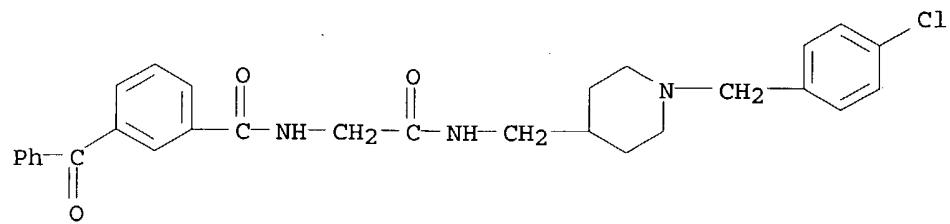
CN Benzamide, 3-benzoyl-N-[2-[(3R)-1-[(3,5-dimethyl-4-isoxazolyl)methyl]-3-pyrrolidinyl]amino]-2-oxoethyl] - (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 226241-41-4 CAPLUS

CN Benzamide, 3-benzoyl-N-[2-[(1-[(4-chlorophenyl)methyl]-4-piperidinyl)methyl]amino]-2-oxoethyl] - (9CI) (CA INDEX NAME)



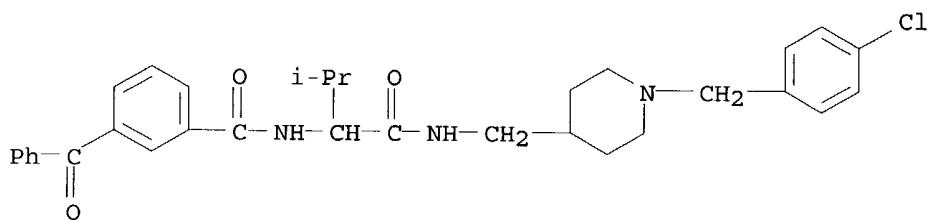
RN 226250-69-7 CAPLUS

CN Benzamide, 3-benzoyl-N-[1-[[[1-[(4-chlorophenyl)methyl]amino]carbonyl]-2-methylpropyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 226232-66-2

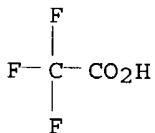
CMF C32 H36 Cl N3 O3



CM 2

CRN 76-05-1

CMF C2 H F3 O2



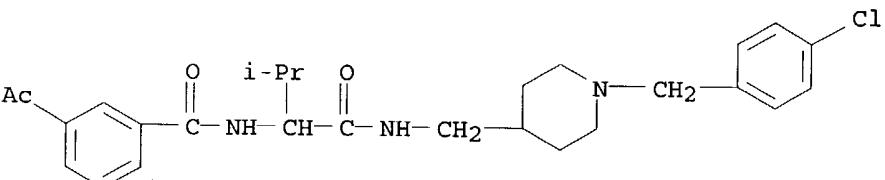
RN 226250-73-3 CAPLUS

CN Benzamide, 3-acetyl-N-[1-[[[1-[(4-chlorophenyl)methyl]amino]carbonyl]-2-methylpropyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

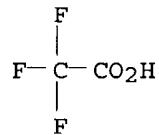
CRN 226232-70-8

CMF C27 H34 Cl N3 O3



CM 2

CRN 76-05-1



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 16 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1999:27805 CAPLUS

DOCUMENT NUMBER: 130:95843

TITLE: Preparation of cyclopentylcarbonylamino acid as inhibitors of $\alpha_4\beta_1$ mediated cell adhesion

INVENTOR(S) : Lobl, Thomas J.; Rishton, Gil; Teegarden, Bradley; Polinsky, Alex; Yamagishi, Masafumi; Tanis, Steven P.; Fisher, Jed F.; Thomas, Edward W.; Chrusciel, Robert A.

PATENT ASSIGNEE(S) : Tanabe Seiyaku Co., Ltd., Japan; Pharmacia & Upjohn Company

SOURCE: PCT Int. Appl., 342 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE : English

FAMILY ACC. NUM. COUNT: 1

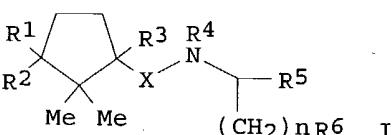
PATENT INFORMATION:

REFERENCES AND CITATIONS

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|--------------|
| WO 9858902 | A1 | 19981230 | WO 1998-US13064 | 19980623 <-- |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| AU 9881633 | A1 | 19990104 | AU 1998-81633 | 19980623 <-- |
| EP 991619 | A1 | 20000412 | EP 1998-931521 | 19980623 <-- |
| EP 991619 | B1 | 20030910 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| JP 2001517246 | T2 | 20011002 | JP 1999-504997 | 19980623 |
| US 6482849 | B1 | 20021119 | US 1998-102584 | 19980623 |
| AT 249421 | E | 20030915 | AT 1998-931521 | 19980623 |
| PT 991619 | T | 20040227 | PT 1998-931521 | 19980623 |
| ES 2206953 | T3 | 20040516 | ES 1998-931521 | 19980623 |
| US 2003130349 | A1 | 20030710 | US 2002-193137 | 20020712 |

US 6596752 B1 20030722
PRIORITY APPLN. INFO.: US 1997-50515P P 19970623
US 1998-102584 A3 19980623
WO 1998-US13064 W 19980623

OTHER SOURCE(S) : MARPAT 130:95843



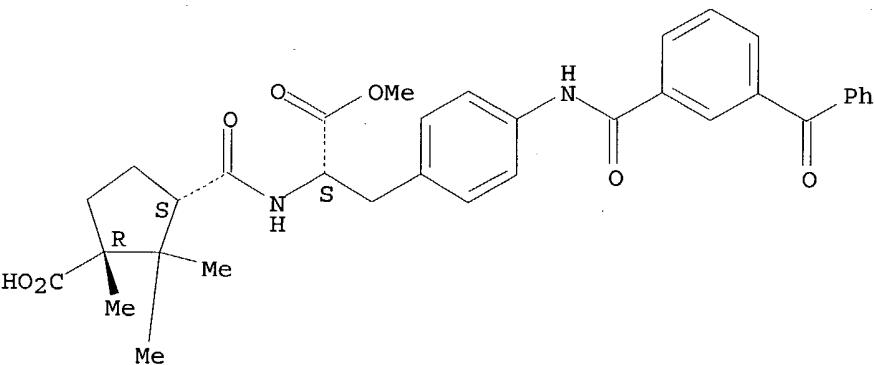
AB Title compds. [I; n = 0, 1; R1 = H, CH3; R2 = CN, CO2H, CONH2, CONHOCH2Ph, NHCOOCH2Ph, etc.; R3 = H, CH3; X = CH, CO; R4 = H, alkyl; R5 = CO2H, CONH2, COOR, etc.; R = alkyl; R6 = aryl, heteroaryl, arylcarbonyl, aarylcyclonaminoalkyl, etc.], a pharmaceutically acceptable salt, a stereoisomer thereof are prepared as inhibitors of $\alpha 4\beta 1$ mediated adhesion to either VCAM or CS-1 and which can be used for treating or preventing $\alpha 4\beta 1$ adhesion mediated conditions in human such as inflammatory diseases. Thus, (1S-cis)- N-[(3-carboxy-2,2,3-trimethylcyclopentyl)carbonyl]-O-(phenylmethyl)-L-tyrosine was prepared and assayed for inhibition of $\beta 1$ -mediated cell adhesion in vitro.

IT 219494-75-4P 219494-76-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of cyclopentylcarbonylamino acid as inhibitors of $\alpha 4\beta 1$ mediated cell adhesion)

RN 219494-75-4 CAPPLUS

CN L-Phenylalanine, 4-[(3-benzoylbenzoyl)amino]-N-[(1S,3R)-3-carboxy-2,2,3-trimethylcyclopentyl]carbonyl-, α -methyl ester (9CI) (CA INDEX NAME)

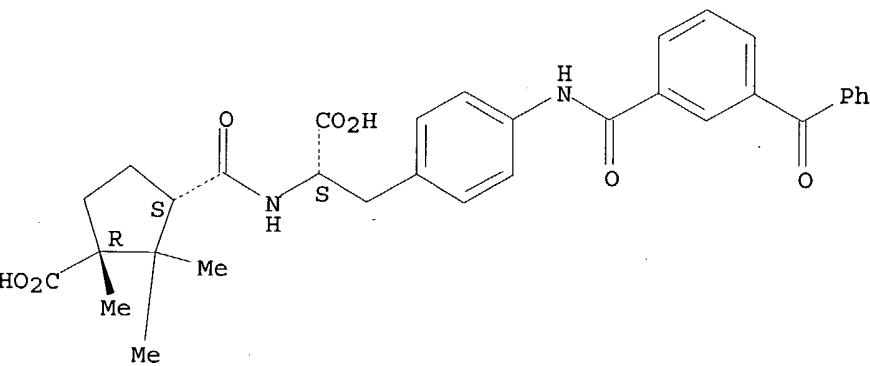
Absolute stereochemistry.



RN 219494-76-5 CAPPLUS

CN L-Phenylalanine, 4-[(3-benzoylbenzoyl)amino]-N-[(1S,3R)-3-carboxy-2,2,3-trimethylcyclopentyl]carbonyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT:

2

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 17 OF 27 CAPPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1998:693417 CAPPLUS

DOCUMENT NUMBER: 129:343326

TITLE: Preparation of benzenes as protein kinase C inhibitors

INVENTOR(S): Mori, Toyoki; Tominaga, Michiaki; Tabusa, Fujio; Ei, Kazuyoshi; Nakaya, Kenji; Takemura, Isao; Shinohara, Tomokazu; Tanada, Yoshihisa; Yamauchi, Takahito;

PATENT ASSIGNEE(S) :

Kitano, Kazuyoshi
Otsuka Pharmaceutical Co., Ltd., Japan
Jpn. Kokai Tokkyo Koho, 359 pp.

SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

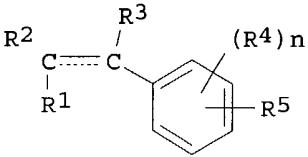
FAMILY ACC. NUM. COUNT:

1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--------|------------|-----------------|--------------|
| JP 10287634 | A2 | 19981027 | JP 1997-110527 | 19970411 <-- |
| PRIORITY APPLN. INFO.: | | | JP 1997-110527 | 19970411 |
| OTHER SOURCE(S) : | MARPAT | 129:343326 | | |

GI



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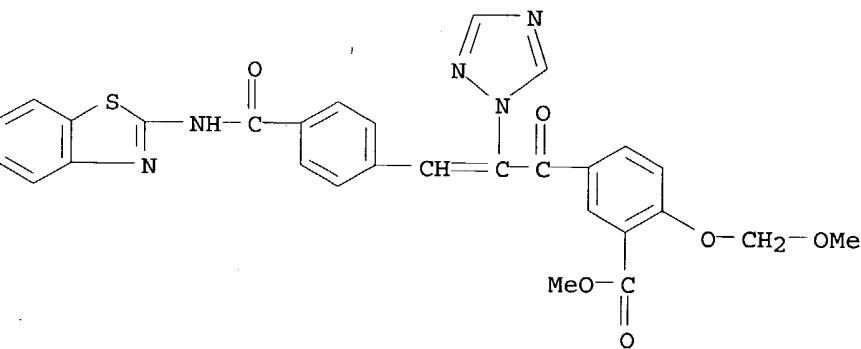
AB Benzenes I [R1 = 5- to 6-membered (un)substituted unsatd. heterocyclyl having 1-4 N, O, or S; cyano, carboxylalkyl, alkoxy carbonyl, H, Bz, (un)substituted amido, etc.; R2 = (un)substituted Bz, (un)substituted 1,2,3,4-tetrahydroquinolinyl carbonyl, pyridyl carbonyl, (un)substituted phenoxy carbonyl, etc.; R3 = H, lower alkyl, PhS, (un)substituted lower alkylthio, cycloalkylthio, cyano, etc.; R4 = H, (un)substituted lower alkyl, lower alkoxy, (un)substituted aminoalkylene, (un)substituted aminoalkyleneoxy; R5 = substituted alkenyl, phenylthioureidocarbonyl, pyrimidylaminocarbonylalkoxy, etc.; n = 1-3; the dot line may be double bond] or their salts are prepared I are useful for prevention and treatment of chronic **rheumatoid arthritis**, systemic lupus erythematosus, atopic dermatitis, **heart failure**, allergy, multiple sclerosis, tumor, Alzheimer-type dementia, etc. Condensation of 250 mg 2-(benzoylmethyl)pyridine with 300 mg 4-[(2-benzothiazolyl)aminocarbonyl]benzaldehyde in C6H6 for 10 h gave 0.3 g 2-[4-[(2-benzoyl-2-(2-pyridyl)vinyl)benzoylamino]benzothiazole.

IT 215504-19-1

RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of benzenes as protein kinase C inhibitors for treatment of diseases)

RN 215504-19-1 CAPLUS

CN Benzoic acid, 5-[3-[(4-[(2-benzothiazolylamino)carbonyl]phenyl)-1-oxo-2-(1H-1,2,4-triazol-1-yl)-2-propenyl]-2-(methoxymethoxy)-, methyl ester (9CI)
(CA INDEX NAME)



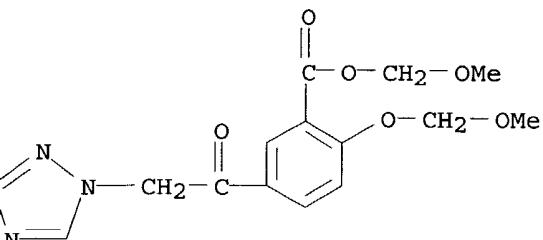
IT 215503-79-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of benzenes as protein kinase C inhibitors for treatment of diseases)

RN 215503-79-0 CAPLUS

CN Benzoic acid, 2-(methoxymethoxy)-5-(1H-1,2,4-triazol-1-ylacetyl)-, methoxymethyl ester (9CI) (CA INDEX NAME)



IT 215504-20-4P 215504-43-1P 215504-55-5P

215504-56-6P 215504-69-1P 215504-93-1P

215504-94-2P 215504-96-4P 215505-17-2P

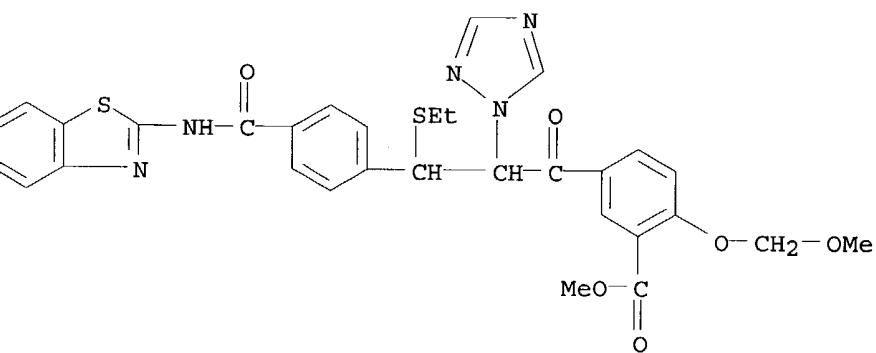
215505-94-5P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of benzenes as protein kinase C inhibitors for treatment of diseases)

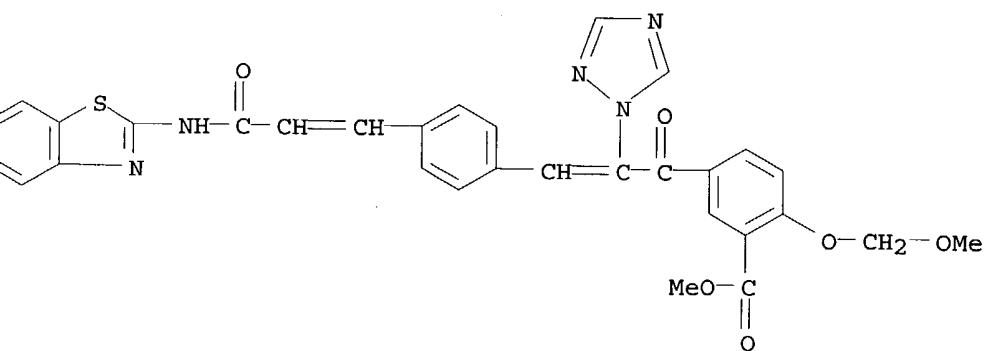
RN 215504-20-4 CAPLUS

CN Benzoic acid, 5-[3-[4-[(2-benzothiazolylamino)carbonyl]phenyl]-3-(ethylthio)-1-oxo-2-(1H-1,2,4-triazol-1-yl)propyl]-2-(methoxymethoxy)-, methyl ester (9CI) (CA INDEX NAME)



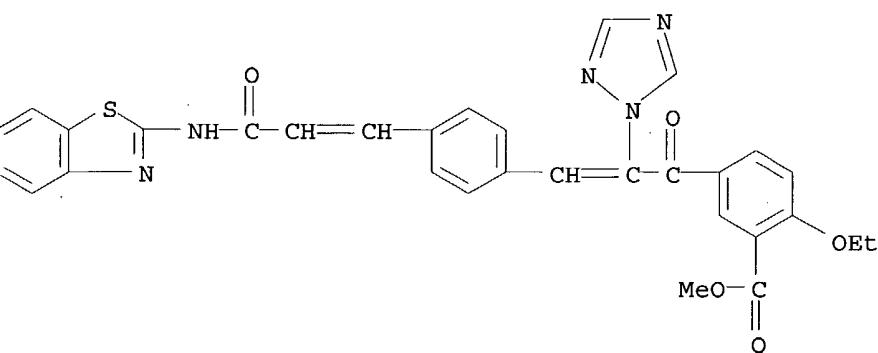
N 215504-43-1 CAPLUS

N Benzoic acid, 5-[3-[4-[(3-(2-benzothiazolylamino)-3-oxo-1-propenyl)phenyl]-1-oxo-2-(1H-1,2,4-triazol-1-yl)-2-propenyl]-2-(methoxymethoxy)-, methyl ester (9CI) (CA INDEX NAME)



RN 215504-55-5 CAPLUS

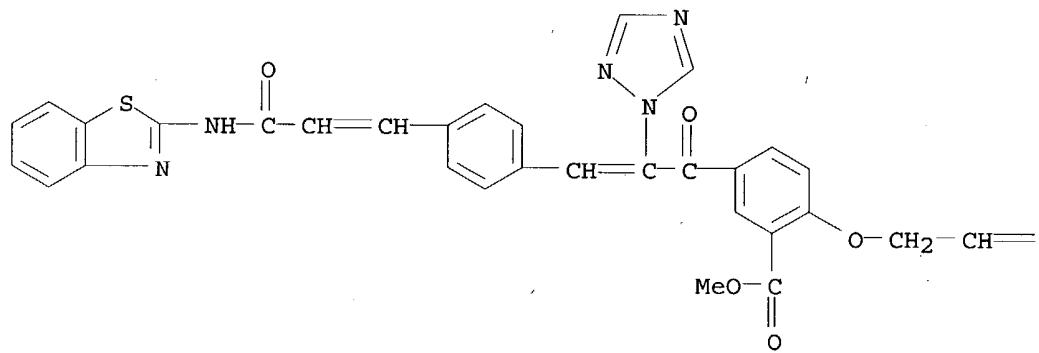
CN Benzoic acid, 5-[3-[4-[3-(2-benzothiazolylamino)-3-oxo-1-propenyl]phenyl]-1-oxo-2-(1H-1,2,4-triazol-1-yl)-2-propenyl]-2-ethoxy-, methyl ester (9CI)
(CA INDEX NAME)



RN 215504-56-6 CAPLUS

CN Benzoic acid, 5-[3-[4-[3-(2-benzothiazolylamino)-3-oxo-1-propenyl]phenyl]-1-oxo-2-(1H-1,2,4-triazol-1-yl)-2-propenyl]-2-(2-propenyl)oxy-, methyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

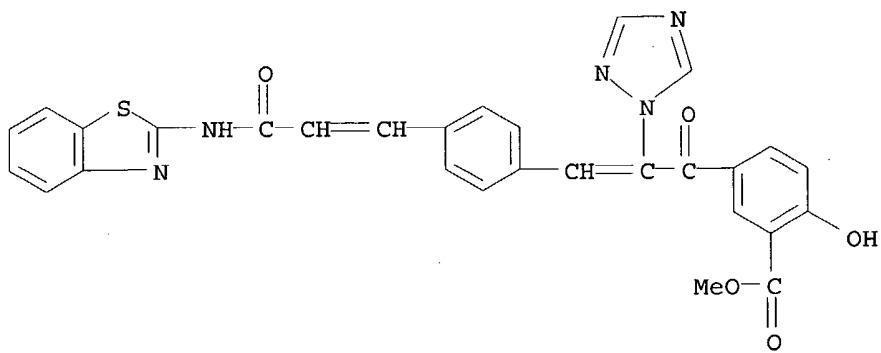


PAGE 1-B

=CH₂

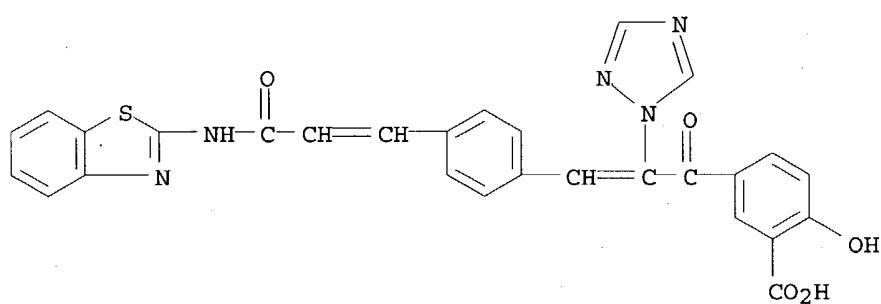
RN 215504-69-1 CAPLUS

CN Benzoic acid, 5-[3-[4-[3-(2-benzothiazolylamino)-3-oxo-1-propenyl]phenyl]-1-oxo-2-(1H-1,2,4-triazol-1-yl)-2-propenyl]-2-hydroxy-, methyl ester (9CI)
(CA INDEX NAME)



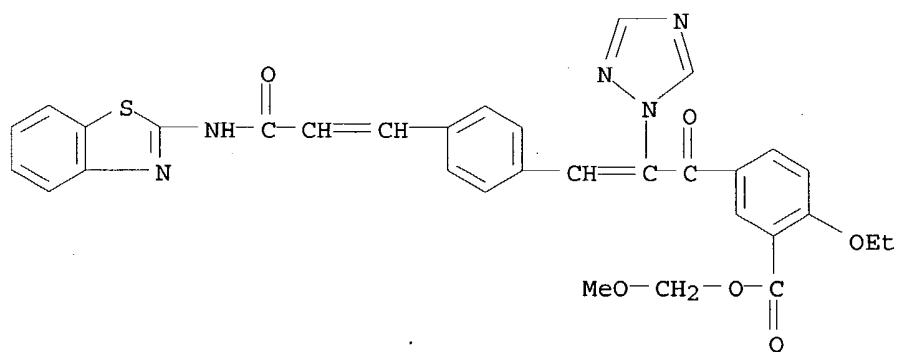
RN 215504-93-1 CAPLUS

CN Benzoic acid, 5-[3-[4-[3-(2-benzothiazolylamino)-3-oxo-1-propenyl]phenyl]-1-oxo-2-(1H-1,2,4-triazol-1-yl)-2-propenyl]-2-hydroxy- (9CI) (CA INDEX NAME)



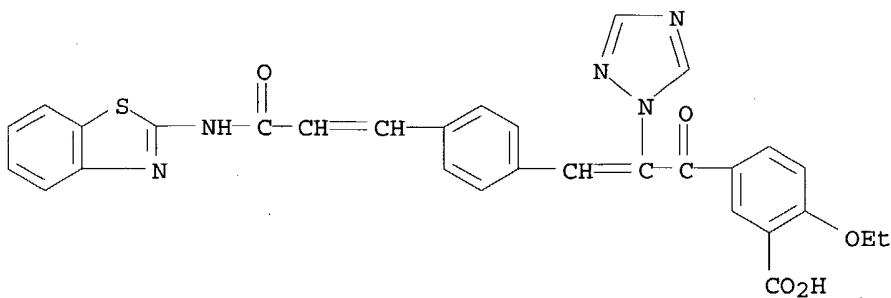
RN 215504-94-2 CAPLUS

CN Benzoic acid, 5-[3-[4-[3-(2-benzothiazolylamino)-3-oxo-1-propenyl]phenyl]-1-oxo-2-(1H-1,2,4-triazol-1-yl)-2-propenyl]-2-ethoxy-, methoxymethyl ester (9CI) (CA INDEX NAME)



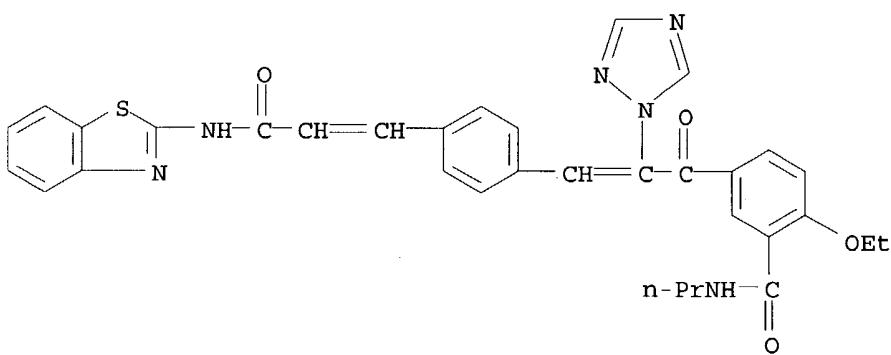
RN 215504-96-4 CAPLUS

CN Benzoic acid, 5-[3-[4-[3-(2-benzothiazolylamino)-3-oxo-1-propenyl]phenyl]-1-oxo-2-(1H-1,2,4-triazol-1-yl)-2-propenyl]-2-ethoxy- (9CI) (CA INDEX NAME)



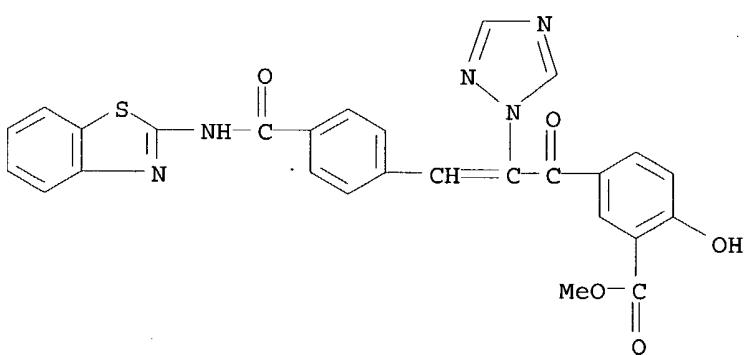
RN 215505-17-2 CAPLUS

CN Benzamide, 5-[3-[4-[3-(2-benzothiazolylamino)-3-oxo-1-propenyl]phenyl]-1-oxo-2-(1H-1,2,4-triazol-1-yl)-2-propenyl]-2-ethoxy-N-propyl- (9CI) (CA INDEX NAME)



RN 215505-94-5 CAPLUS

CN Benzoic acid, 5-[3-[4-[(2-benzothiazolylamino)carbonyl]phenyl]-1-oxo-2-(1H-1,2,4-triazol-1-yl)-2-propenyl]-2-hydroxy-, methyl ester (9CI) (CA INDEX NAME)



L6 ANSWER 18 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1998:682372 CAPLUS

DOCUMENT NUMBER:

129:316232

TITLE:

Preparation of compounds and compositions for

treating diseases associated with serine
protease, particularly tryptase, activity

Church, Timothy J.; Cutshall, Neil Scott; Gangloff,
Anthony R.; Jenkins, Thomas E.; Linsell, Martin S.;
Litvak, Joane; Rice, Kenneth D.; Spencer, Jeffrey R.;
Wang, Vivian R.

PATENT ASSIGNEE(S):

Axys Pharmaceuticals Corporation, USA

SOURCE:

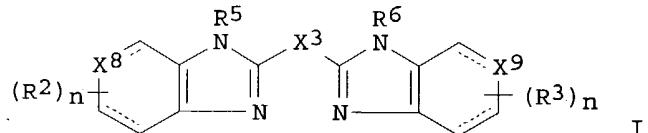
PCT Int. Appl., 108 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|--------------|
| WO 9845275 | A1 | 19981015 | WO 1997-US21849 | 19971201 <-- |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| AU 9858950 | A1 | 19981030 | AU 1998-58950 | 19971201 <-- |
| AU 752064 | B2 | 20020905 | | |
| CN 1251579 | A | 20000426 | CN 1997-182098 | 19971201 <-- |
| EE 9900477 | A | 20000615 | EE 1999-477 | 19971201 <-- |
| EE 4055 | B1 | 20030616 | | |
| EP 1019382 | A1 | 20000719 | EP 1997-954520 | 19971201 <-- |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| NZ 500029 | A | 20010223 | NZ 1997-500029 | 19971201 |
| JP 2001519806 | T2 | 20011023 | JP 1998-542739 | 19971201 |
| MX 9909006 | A | 20000831 | MX 1999-9006 | 19991001 <-- |
| NO 9904858 | A | 19991206 | NO 1999-4858 | 19991006 <-- |
| LV 12495 | B | 20010120 | LV 1999-153 | 19991102 |
| LT 4704 | B | 20000925 | LT 1999-131 | 19991105 <-- |
| US 2001053779 | A1 | 20011220 | US 2001-874412 | 20010604 |
| US 6562854 | B2 | 20030513 | | |
| US 2003212120 | A1 | 20031113 | US 2003-401415 | 20030314 |
| PRIORITY APPLN. INFO.: | | | US 1997-833674 | A 19970407 |
| | | | US 1994-357491 | B2 19941214 |
| | | | US 1997-980515 | A1 19971201 |
| | | | WO 1997-US21849 | W 19971201 |
| | | | US 2001-874412 | A1 20010604 |

OTHER SOURCE(S): CASREACT 129:316232; MARPAT 129:316232
 GI



AB A preferred aspect of the invention are compds. of Formula [I; in which: the dashed lines independently represent optional bonds; each R2 independently is (C1-6)alkyl, (C1-6)alkyloxy, halo or hydroxy; each R3 independently is (C1-6)alkyl, (C1-6)alkyloxy, halo or hydroxy; X3 is -C(O)- or -CR7R8-, X8 is -CH(R1)n1- or -C(R1)n1=, wherein R1 is amino(N1-4)azolidinyl, amino(N1-4)azolyl, (N1-4)azolidinyl, (N1-4)azolyl, etc.; X8 is -N= or -NH(R1)n1-, wherein R1 is -C(NR9)R9, -C(NH)NHR10 or -C(NH)NR10R10, wherein R9 independently is hydrogen or (C1-6)alkyl and each R10 independently is (C1-6)alkyl; and X9 is -CH(R4)- or -C(R4)=, wherein R4 is -R12, -OR12, -N(R13)R12, etc.; wherein R4 is -C(O)R12, -C(O)OR12, -C(O)N(R13)R12, etc.; R12 is cyano, guanidino, halo, alkyl, etc.; R13 is hydrogen, alkyl; R5 is hydrogen or (C1-4)alkyl, R6 is hydrogen or (C1-4) alkyl; R7 is hydrogen, methyl; R8 is hydrogen Me, hydroxy; n = 0-4]. The compds., compns. and methods are effective for the prevention and treatment of inflammatory diseases associated with the respiratory tract, such as asthma and allergic rhinitis, as well as other types of immunomediated inflammatory disorders, such as **rheumatoid arthritis**, conjunctivitis and inflammatory bowel disease, various dermatol. conditions, as well as certain viral

conditions. The compds. comprise potent and selective inhibitors of the mast-cell protease tryptase. The compns. for **treating** these conditions include oral, inhalant, topical and parenteral prepns. as well as devices comprising such prepns.

IT 214781-30-3P 214781-74-5P

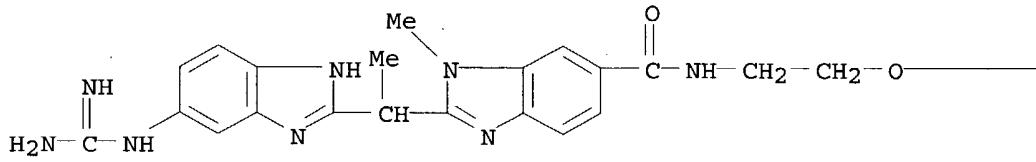
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of ampicilimide- α -L- β -D-glucoside for treating human inflammatory

(preparation of arenoimidazoles for treating human inflammatory disorder)

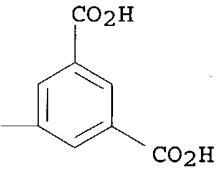
RN 214781-30-3 CAPLUS

CN 1,3-Benzenedicarboxylic acid, 5-[2-[[2-[1-[5-[(aminoiminomethyl)amino]-1H-benzimidazol-2-yl]ethyl]-1-methyl-1H-benzimidazol-6-yl]carbonyl]amino]ethoxy]- (9CI) (CA INDEX NAME)

PAGE 1-A

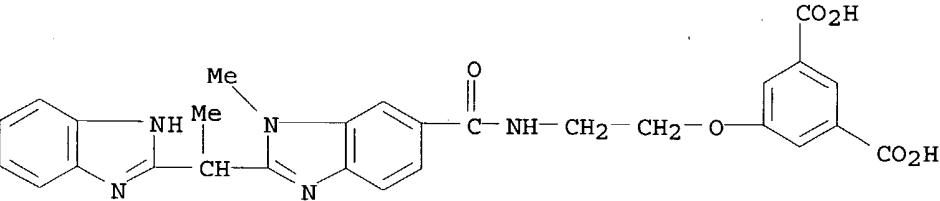


PAGE 1-B



RN 214781-74-5 CAPLUS

CN 1,3-Benzenedicarboxylic acid, 5-[2-[[2-[1-(1H-benzimidazol-2-yl)ethyl]-1-methyl-1H-benzimidazol-6-yl]carbonyl]amino]ethoxy- (9CI) (CA INDEX NAME)



REFERENCE COUNT:

7

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT.

ANSWER 19 OF 27 CAPLUS COPYRIGHT 2004 ACS OR STN

ACCESSION NUMBER: 1998-251153 CAPLUS

ACCESSION NUMBER: 1990.25115
DOCUMENT NUMBER: 138-308308

DOCUMENT NUMBER: 120306308
TITLE: The preparation and use of ortho-sulfonamido aryl hydroxamic acids as matrix metalloproteinase and TACE inhibitors

INVENTOR(S) : Levin, Jeremy Ian; Du Mila, T.; Venkatesan, Aranapakam Mudumbai; Nelson, Frances Christy; Zask, Arie; Gu, Yansong

PATENT ASSIGNEE(S): American Cyanamid Company, USA

SOURCE: American Cyanamid Company
PCT Int. Appl. No. 164 pp

for the: App
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

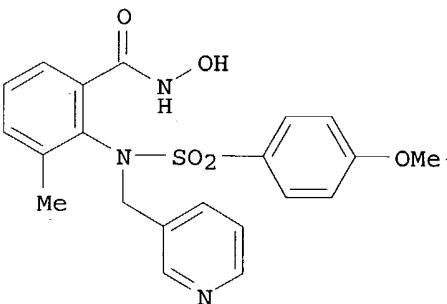
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|------------------|--------------|
| WO 9816503 | A2 | 19980423 | WO 1997-US18280 | 19971008 <-- |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW | | | | |
| RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| CA 2268894 | AA | 19980423 | CA 1997-2268894 | 19971008 <-- |
| AU 9851458 | A1 | 19980511 | AU 1998-51458 | 19971008 <-- |
| AU 731737 | B2 | 20010405 | | |
| EP 938471 | A1 | 19990901 | EP 1997-946246 | 19971008 <-- |
| EP 938471 | B1 | 20011212 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI, RO | | | | |
| BR 9712525 | A | 19991019 | BR 1997-12525 | 19971008 <-- |
| CN 1240429 | A | 20000105 | CN 1997-180613 | 19971008 <-- |
| JP 2001504809 | T2 | 20010410 | JP 1998-518448 | 19971008 |
| AT 210637 | E | 20011215 | AT 1997-946246 | 19971008 |
| ES 2166102 | T3 | 20020401 | ES 1997-946246 | 19971008 |
| PT 938471 | T | 20020531 | PT 1997-946246 | 19971008 |
| ZA 9709233 | A | 19990415 | ZA 1997-9233 | 19971015 <-- |
| TW 410220 | B | 20001101 | TW 1997-86114187 | 19971015 <-- |
| KR 2000049196 | A | 20000725 | KR 1999-703294 | 19990415 <-- |
| HK 1021178 | A1 | 20020404 | HK 2000-100090 | 20000106 |
| PRIORITY APPLN. INFO.: | | | US 1996-732631 | A 19961016 |
| | | | WO 1997-US18280 | W 19971008 |

OTHER SOURCE(S): MARPAT 128:308308

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II

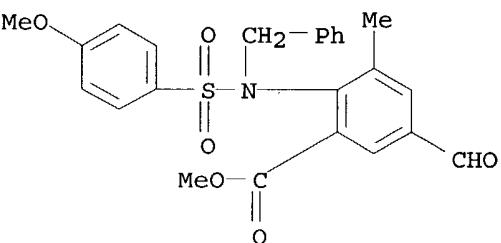
AB The invention relates to novel, low mol. weight, non-peptide inhibitors of matrix metalloproteinases (e.g. gelatinases, stromelysins and collagenases) and TNF- α converting enzyme (TACE, tumor necrosis factor- α converting enzyme). The compds. are useful for the treatment of diseases in which these enzymes are implicated such as arthritis, tumor growth and metastasis, angiogenesis, tissue ulceration, abnormal wound healing, periodontal disease, bone disease, proteinuria, aneurysmal aortic disease, degenerative cartilage loss following traumatic joint injury, demyelinating diseases of the nervous system, graft rejection, cachexia, anorexia, inflammation, fever, insulin resistance, septic shock, congestive heart failure, inflammatory disease of the central nervous system, inflammatory bowel disease, HIV infection, age related macular degeneration, diabetic retinopathy, proliferative vitreoretinopathy, retinopathy of prematurity, ocular inflammation, keratoconus, Sjogren's syndrome, myopia, ocular tumors, and ocular angiogenesis/neovascularization. The invention compds. are represented by the formula ZSO2N(CH2R7)ACONHOH [I; A = (un)substituted

Ph or naphthyl; Z = (un)substituted aryl, heteroaryl, or benzo-fused heteroaryl; R7 = H, (un)substituted alk(en/yn)yl, Ph, naphthyl, 5- or 6-membered heteroaryl, cycloalkyl, or cycloheteroalkyl; or R7CH₂NA forms a non-aromatic 1,2-benzo-fused 7- to 10-membered heterocyclic ring with an optional addition benzo fusion; where the hydroxamic acid moiety and the sulfonamido moiety are bonded to adjacent carbons on group A], and include pharmaceutically acceptable salts, optical isomers, and diastereomers. Preps. of over 400 compds., including I and their intermediates, are given. For instance, 2-[(4-methoxybenzenesulfonyl)amino]-3-methylbenzoic acid Me ester (preparation given) was N-alkylated by 3-picolyll chloride-HCl (83%), followed by hydrolysis of the ester with LiOH in aqueous THF (100%), activation with oxalyl chloride, and hydroxamidation with NH₂OH.HCl (51%), to give title compound II. At 50 mg/kg/day in rats with cartilage implants, II gave 44.6% inhibition of cartilage weight loss, and 51.2% inhibition of cartilage collagen loss.

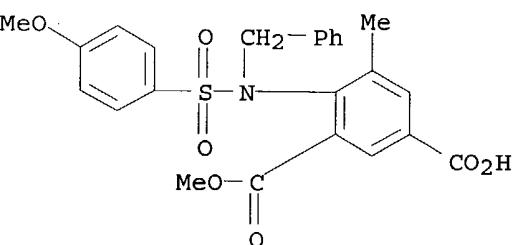
IT 206549-41-9P 206549-42-OP 206549-43-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of ortho-sulfonamido aryl hydroxamic acids as matrix metalloproteinase and TACE inhibitors)

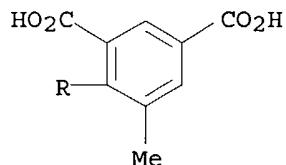
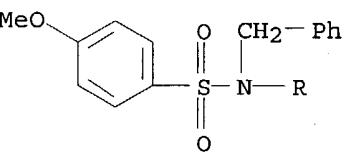
RN 206549-41-9 CAPLUS
 CN Benzoic acid, 5-formyl-2-[[[(4-methoxyphenyl)sulfonyl](phenylmethyl)amino]-3-methyl-, methyl ester (9CI) (CA INDEX NAME)



RN 206549-42-0 CAPLUS
 CN 1,3-Benzenedicarboxylic acid, 4-[[[(4-methoxyphenyl)sulfonyl](phenylmethyl)amino]-5-methyl-, 3-methyl ester (9CI) (CA INDEX NAME)



RN 206549-43-1 CAPLUS
 CN 1,3-Benzenedicarboxylic acid, 4-[[[(4-methoxyphenyl)sulfonyl](phenylmethyl)amino]-5-methyl- (9CI) (CA INDEX NAME)

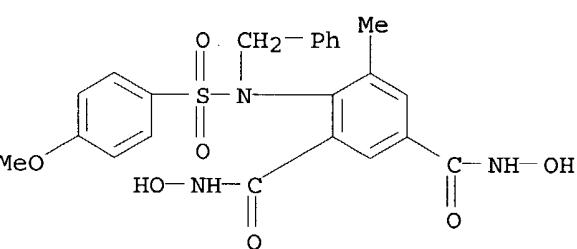


IT 206549-44-2P 206549-45-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of ortho-sulfonamido aryl hydroxamic acids as matrix metalloproteinase and TACE inhibitors)

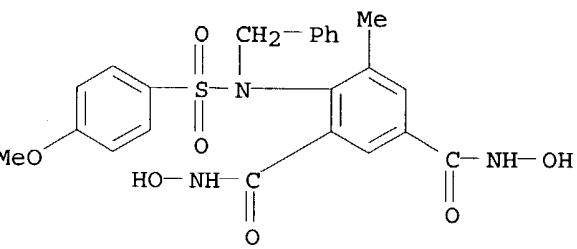
RN 206549-44-2 CAPLUS

CN 1,3-Benzenedicarboxamide, N,N'-dihydroxy-4-[[[4-methoxyphenyl)sulfonyl](phenylmethyl)amino]-5-methyl- (9CI) (CA INDEX NAME)



RN 206549-45-3 CAPLUS

CN 1,3-Benzenedicarboxamide, N,N'-dihydroxy-4-[[[4-methoxyphenyl)sulfonyl](phenylmethyl)amino]-5-methyl-, disodium salt (9CI) (CA INDEX NAME)



●2 Na

6 ANSWER 20 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1997:310799 CAPLUS

DOCUMENT NUMBER:

126:293363

TITLE: Preparation of 2-phenylsulfonyl- and

2-(heterocyclsulfonyl)quinazoline derivatives as chymase inhibitors

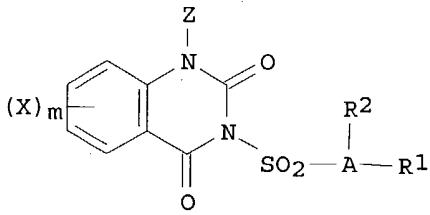
INVENTOR(S):

Fukami, Harukazu; Ito, Akiko; Niwata, Shinjiro; Kakutani, Saki; Sumida, Motoo; Kiso, Yoshinobu

PATENT ASSIGNEE(S) : Suntory Limited, Japan; Fukami, Harukazu; Ito, Akiko; Niwata, Shinjiro; Kakutani, Saki; Sumida, Motoo; Kiso, Yoshinobu
 SOURCE: PCT Int. Appl., 120 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|--------------|
| WO 9711941 | A1 | 19970403 | WO 1996-JP2830 | 19960927 <-- |
| W: JP, US RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| EP 795548 | A1 | 19970917 | EP 1996-932039 | 19960927 <-- |
| EP 795548 | B1 | 20020703 | | |
| R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE | | | | |
| ES 2175127 | T3 | 20021116 | ES 1996-932039 | 19960927 |
| US 5814631 | A | 19980929 | US 1997-849114 | 19970528 <-- |
| PRIORITY APPLN. INFO.: | | | JP 1995-285437 | A 19950928 |
| | | | JP 1996-116557 | A 19960510 |
| | | | WO 1996-JP2830 | W 19960927 |

OTHER SOURCE(S) : MARPAT 126:293363
 GI



AB Quinazoline derivs. represented by general formula [I; group A = benzene, pyridine, pyrrole, or pyrazole ring; m = 0-2; X = OH, NO₂, halo, C1-4 (halo)alkyl, or (halo)alkoxy, C7-12 aralkyloxy; Z = group to form a naphthalene or quinoline ring together with the benzene ring to which X is attached; R1, R2 = H, halo, C1-4 (halo)alkyl, NO₂, cyano, pyrazolyl, tetrazolyl, C1-4 alkyl, CO₂H, allyloxy carbonyl, C1-4 (un)substituted alkoxy; or R1 and R2 together with the benzene ring represent a naphthalene or quinoline ring; Z = H, C1-4 (halo)alkyl, C2-5 alkenyl, (un)substituted aralkyl, aromatic heterocyclylalkyl, C1-4 alkoxy carbonylmethyl, allyloxy carbonylmethyl, (1° or 2° amino) carbonylmethyl, (un)substituted aralkyloxymethyl; proviso given] or pharmacol. acceptable salts thereof are prepared. They are useful as preventives/remedies for cardiac and circulatory diseases (e.g. hypertension or heart failure) caused by abnormal overprodn. of angiotensin II. Thus, a quinazolinedione derivative (II; R = H) (preparation given) was condensed with 3-(diethylamino)-1,5-dihydro-2,4,3-benzodioxaphosphepine in the presence of tetrazole in DMF, followed by oxidation with m-chloroperbenzoic acid in CH₂Cl₂ and hydrogenolysis over 10% Pd-C in dioxane under H atmospheric to give II [R = P(O)(OH)₂]. II (R = H) and II [R = P(O)(OH)₂] showed IC₅₀ of 0.060 and 0.025 μM, resp., for inhibiting human heart chymase. The title compds. I also inhibited cathepsin G and chymotrypsin. Formulation examples containing I were given.

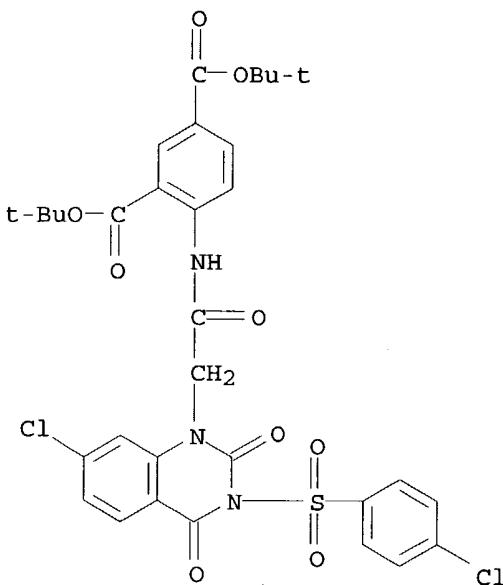
IT 189062-20-2P 189062-21-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of N-phenylsulfonyl- and N-(heterocyclylsulfonyl)quinazoline derivs. as chymase inhibitors for treating heart or circulatory diseases)

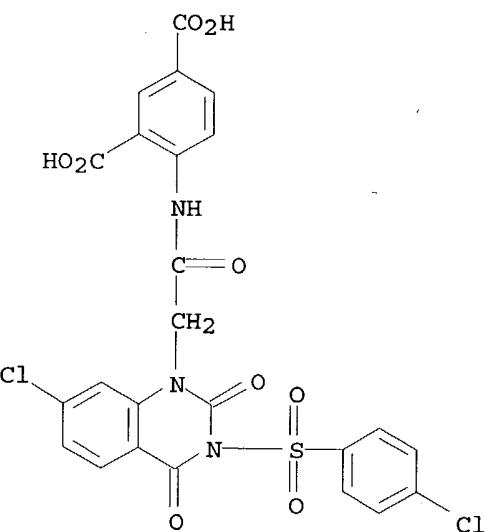
RN 189062-20-2 CAPLUS

CN 1,3-Benzenedicarboxylic acid, 4-[[[7-chloro-3-[(4-chlorophenyl)sulfonyl]-3,4-dihydro-2,4-dioxo-1(2H)-quinazolinyl]acetyl]amino]-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)



RN 189062-21-3 CAPLUS

CN 1,3-Benzenedicarboxylic acid, 4-[[[7-chloro-3-[(4-chlorophenyl)sulfonyl]-3,4-dihydro-2,4-dioxo-1(2H)-quinazolinyl]acetyl]amino]- (9CI) (CA INDEX NAME)



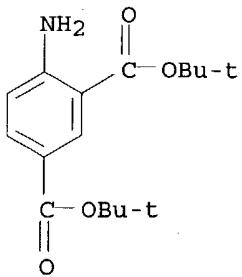
IT 189062-98-4, 2,4-Di-tert-butoxycarbonylaniline

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of N-phenylsulfonyl- and N-(heterocyclsulfonyl)quinazoline derivs. as chymase inhibitors for treating heart or circulatory diseases)

RN 189062-98-4 CAPLUS

CN 1,3-Benzenedicarboxylic acid, 4-amino-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)



L6 ANSWER 21 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1994:483335 CAPLUS

DOCUMENT NUMBER: 121:83335

TITLE: Preparation of substituted benzimidazoles useful as angiotensin II receptor antagonists

INVENTOR(S): Franz, Robert G.; Weinstock, Joseph

PATENT ASSIGNEE(S): SmithKline Beecham Corp., USA

SOURCE: U.S., 19 pp. Cont.-in-part of U.S. Ser No. 509,268, abandoned.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

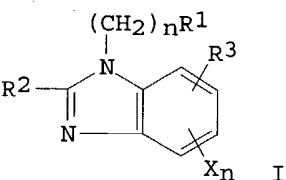
FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|--------------|
| US 5294631 | A | 19940315 | US 1992-937885 | 19921013 <-- |
| WO 9116313 | A1 | 19911031 | WO 1991-US2396 | 19910408 <-- |
| W: AU, CA, JP, KR, US | | | | |
| RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE | | | | |
| PRIORITY APPLN. INFO.: | | | US 1990-509268 | 19900413 |
| | | | WO 1991-US2396 | 19910408 |

OTHER SOURCE(S): MARPAT 121:83335

GI



AB The preparation of title compds. I [R1 = CONHCH(Y)(CH2)naryl, CONHCH(Y)(CH2)nheteroaryl, substituted Ph, etc.; R2 = H, C2-10 alkyl, C3-10 alkenyl, C3-6 cycloalkyl, etc.; R3 = (CH2)nY, CH:CY(CH2)naryl, CH:CY(CH2)nheteroaryl, (CH2)nCONHCHY(CH2)naryl, etc.; Y = substituted carboxy, tetrazol-5-yl; X = halo, perfluoroalkyl, C1-6 alkyl, etc.; n = 0-2], useful in regulating hypertension and in the **treatment of** congestive **heart failure**, renal failure, and glaucoma, pharmaceutical compns. including these antagonists, and methods of using these compds. to produce angiotensin II receptor antagonism in mammals, is described. Thus, cyclization of 5-bromo-2-[(2-chlorophenyl)methyl-N-valeryl]amino-3-nitrobenzoic acid (preparation given) in the presence of sodium bicarbonate solution containing sodium hydrosulfite at Ph 7.1 followed by acidic workup gave title compound, 5-bromo-2-butyl-1-(2-chlorophenyl)methyl-1H-benzimidazole-7-carboxylic acid. The pharmaceutical compns. of some of the compds. prepared is given.

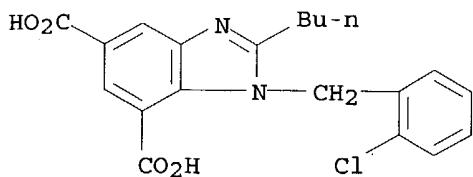
IT 138993-09-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses).

(preparation of, as angiotensin II receptor antagonist)

RN 138993-09-6 CAPLUS

CN 1H-Benzimidazole-5,7-dicarboxylic acid, 2-butyl-1-[(2-chlorophenyl)methyl]-
(9CI) (CA INDEX NAME)



L6 ANSWER 22 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1991:656180 CAPLUS

DOCUMENT NUMBER: 115:256180

TITLE: Preparation of α -hexyl-4-(benzoylamino)-1H-imidazole-1-acetic acid, its derivatives, and analogs as angiotensin II antagonists

INVENTOR(S): Lifer, Sherryl L.; Marshall, Winston S.; Mohamadi, Fariborz; Reel, Jon K.; Simon, Richard L.; Steinberg, Mitchell I.; Whitesitt, Celia A.

PATENT ASSIGNEE(S): Eli Lilly and Co., USA

SOURCE: Can. Pat. Appl., 79 pp.

CODEN: CPXXEB

DOCUMENT TYPE: Patent

LANGUAGE: English

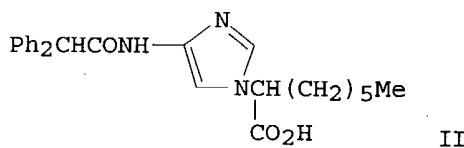
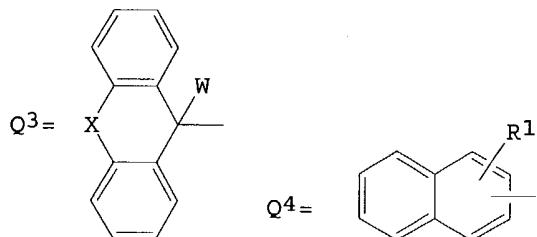
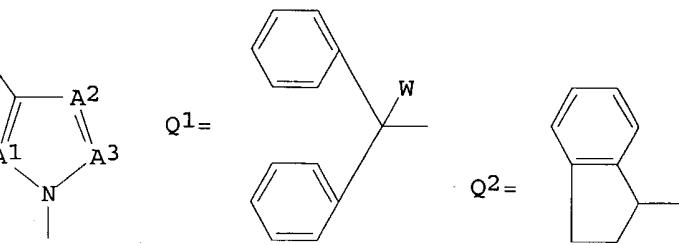
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|--------------|
| CA 2030961 | AA | 19910531 | CA 1990-2030961 | 19901127 <-- |
| US 5073566 | A | 19911217 | US 1989-444456 | 19891130 <-- |
| EP 438869 | A1 | 19910731 | EP 1990-312913 | 19901128 <-- |
| EP 438869 | B1 | 19941214 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE | | | | |
| ES 2064665 | T3 | 19950201 | ES 1990-312913 | 19901128 <-- |
| JP 03193745 | A2 | 19910823 | JP 1990-336864 | 19901129 <-- |
| JP 2935740 | B2 | 19990816 | | |
| US 5312936 | A | 19940517 | US 1991-761127 | 19910917 <-- |
| US 5571925 | A | 19961105 | US 1994-183685 | 19940119 <-- |
| US 5563278 | A | 19961008 | US 1995-453537 | 19950530 <-- |
| PRIORITY APPLN. INFO.: | | | | |
| | | | US 1989-444456 | 19891130 |
| | | | US 1989-444465 | 19891130 |
| | | | US 1991-761127 | 19910917 |
| | | | US 1994-183685 | 19940119 |

OTHER SOURCE(S): MARPAT 115:256180

GI



AB ArZGCHR1R2 [I; G = phenylene, bivalent 5-membered heterocyclic ring Q; Ar = substituted Ph, aromatic residue Q1-Q4; R1 = (CH₂)_nR3; R2 = C₄₋₇ alkyl; Z = CO, CONH, NHCO, CH₂CONH, O, NH, CH₂, bond; R3 = HO, HO₂C, 5-tetrazolyl; R4 = H, HO, halo, NO₂, amino, Me, AcNH, MeSO₂NH; A1-A3 = N, CH; W = Me, Et, HO; X = bond, O; n = 0-4] or their pharmaceutically acceptable salts or solvates, useful for **treating** congestive **heart failure** and angiotensin-induced hypertension, were prepared. A solution of 41.8 g 4-nitroimidazole in DMF was refluxed 1 h with a suspension of NaH in DMF, the mixture was **treated** by 92 g Me(CH₂)₅CHBrCO₂Et in DMF, and the whole refluxed for 2 h to give 10.40 g Et 4-nitro- α -hexyl-1H-imidazole-1-acetate. Hydrogenation of the latter (5.9 g) over Pd/C in EtOH gave 5.3 g 4-amino analog which (750 mg) was coupled with Ph₂CHCO₂H in the presence of carbonyldiimidazole in DMF to give 250 mg title compound (II·HCl). The latter at 10-5 M (test form unspecified) gave 80% inhibition of binding of ¹²⁵I-angiotensin II to rat adrenal membranes. Formulations containing I are given.

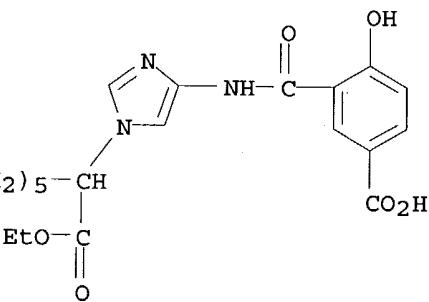
IT 137417-53-9P 137417-72-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of, as angiotensin II antagonist)

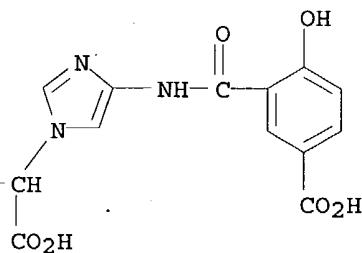
RN 137417-53-9 CAPLUS

CN 1H-Imidazole-1-acetic acid, 4-[(5-carboxy-2-hydroxybenzoyl)amino]- α -hexyl-, α -ethyl ester (9CI) (CA INDEX NAME)



RN 137417-72-2 CAPLUS

CN 1H-Imidazole-1-acetic acid, 4-[(5-carboxy-2-hydroxybenzoyl)amino]- α -



L6 ANSWER 23 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1991:428987 CAPLUS

DOCUMENT NUMBER: 115:28987

TITLE: Cardioactive dibenzo[1,5]dioxocin-5-one derivatives
INVENTOR(S): Frobel, Klaus; Lenfers, Jan Bernd; Fey, Peter; Knorr, Andreas; Stasch, Johannes Peter; Mueller, Hartwig; Bischoff, Erwin; Dellweg, Hans Georg

PATENT ASSIGNEE(S): Bayer A.-G., Germany

SOURCE: Ger. Offen., 60 pp.

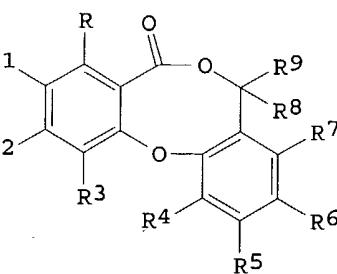
DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|------------------|-----------------|--------------|
| DE 3919255 | A1 | 19901220 | DE 1989-3919255 | 19890613 <-- |
| US 5089487 | A | 19920218 | US 1990-528667 | 19900524 <-- |
| AU 9056008 | A1 | 19901220 | AU 1990-56008 | 19900528 <-- |
| AU 632578 | B2 | 19930107 | | |
| NO 9002400 | A | 19901214 | NO 1990-2400 | 19900530 <-- |
| NO 175745 | B | 19940822 | | |
| NO 175745 | C | 19941130 | | |
| EP 411268 | A2 | 19910206 | EP 1990-110336 | 19900531 <-- |
| EP 411268 | A3 | 19910703 | | |
| EP 411268 | B1 | 19950419 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE | | | | |
| AT 121396 | E | 19950515 | AT 1990-110336 | 19900531 <-- |
| ES 2072332 | T3 | 19950716 | ES 1990-110336 | 19900531 <-- |
| CA 2018659 | AA | 19901213 | CA 1990-2018659 | 19900611 <-- |
| DD 298423 | A5 | 19920220 | DD 1990-341537 | 19900611 <-- |
| HU 54136 | A2 | 19910128 | HU 1990-3811 | 19900612 <-- |
| JP 03024073 | A2 | 19910201 | JP 1990-151794 | 19900612 <-- |
| ZA 9004524 | A | 19910424 | ZA 1990-4524 | 19900612 <-- |
| CN 1048041 | A | 19901226 | CN 1990-104489 | 19900613 <-- |
| PRIORITY APPLN. INFO.: | | | DE 1989-3919255 | 19890613 |
| THER SOURCE(S): | | MARPAT 115:28987 | | |
| I | | | | |



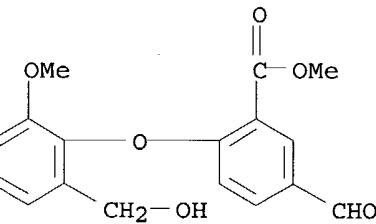
AB Penicilllide derivs. I (R-R7 = H, (un)substituted alkyl, alkenyl, alkynyl; R8, R9 = H, (un)substituted alkyl] were prepared for use as antihypertensives, antiarrhythmics, and in the treatment of cardiac insufficiency (no data). Thus, I (R = R2 = R3 = R5-R9 = H, R1 = CHO, R4 = OMe) was obtained by alkoxylating 2,5-Br[(MeO)2CH]C6H3CO2Me with 2-methoxy-6-(2-tetrahydropyran-3-yloxy)methylphenol, ether cleavage, hydrolysis, and lactonization. Many I were prepared from penicilllide.

IT 134563-73-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and ester hydrolysis of)

RN 134563-73-8 CAPLUS

CN Benzoic acid, 5-formyl-2-[2-(hydroxymethyl)-6-methoxyphenoxy]-, methyl ester (9CI) (CA INDEX NAME)

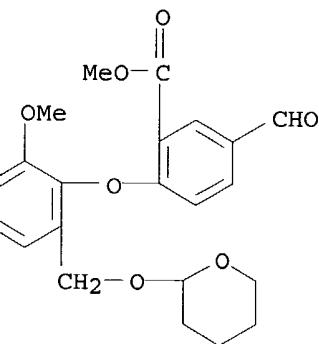


IT 134563-70-5P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and ether cleavage of)

RN 134563-70-5 CAPLUS

CN Benzoic acid, 5-formyl-2-[2-methoxy-6-[[[tetrahydro-2H-pyran-2-yl]oxy]methyl]phenoxy]-, methyl ester (9CI) (CA INDEX NAME)

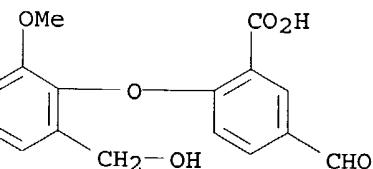


T 134563-81-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and lactonization of)

N 134563-81-8 CAPLUS

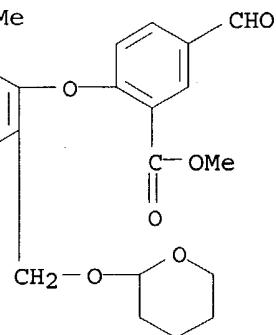
N Benzoic acid, 5-formyl-2-[2-(hydroxymethyl)-6-methoxyphenoxy]- (9CI) (CA INDEX NAME)



T 134563-71-6P

RL: SPN (Synthetic preparation); PREP (Preparation)

RN (preparation of)
 134563-71-6 CAPLUS
 CN Benzoic acid, 5-formyl-2-[2-methoxy-4-methyl-6-[(tetrahydro-2H-pyran-2-yl)oxy]methyl]phenoxy]-, methyl ester (9CI) (CA INDEX NAME)



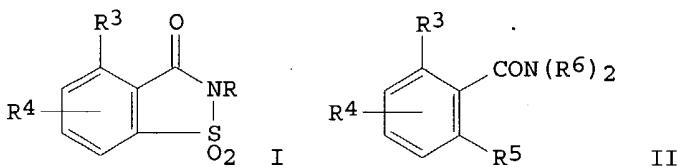
L6 ANSWER 24 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1991:228897 CAPLUS
 DOCUMENT NUMBER: 114:228897
 TITLE: Preparation of saccharin derivatives useful as proteolytic enzyme inhibitors.
 INVENTOR(S): Dunlap, Richard Paul; Boaz, Neil Warren; Mura, Albert Joseph; Hlasta, Dennis John
 PATENT ASSIGNEE(S): Sterling Drug Inc., USA
 SOURCE: PCT Int. Appl., 111 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 7
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------------|-----------------|--------------|
| WO 9013549 | A1 | 19901115 | WO 1990-US2434 | 19900501 <-- |
| W: AU, FI, JP, KR, NO | | | | |
| RW: AT, BE, CH, DE, DK, ES, FR, GB, IT, LU, NL, SE | | | | |
| CA 1336960 | A1 | 19950912 | CA 1989-611223 | 19890913 <-- |
| CA 1340252 | A1 | 19981215 | CA 1989-611220 | 19890913 <-- |
| AU 9056649 | A1 | 19901129 | AU 1990-56649 | 19900501 <-- |
| AU 637614 | B2 | 19930603 | | |
| EP 471756 | A1 | 19920226 | EP 1990-907695 | 19900501 <-- |
| EP 471756 | B1 | 19971029 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE | | | | |
| JP 04507095 | T2 | 19921210 | JP 1990-507810 | 19900501 <-- |
| AT 159720 | E | 19971115 | AT 1990-907695 | 19900501 <-- |
| ES 2110414 | T3 | 19980216 | ES 1990-907695 | 19900501 <-- |
| IL 94278 | A1 | 19950330 | IL 1990-94278 | 19900603 <-- |
| DD 297644 | A5 | 19920116 | DD 1990-343934 | 19900910 <-- |
| NO 9104217 | A | 19911028 | NO 1991-4217 | 19911028 <-- |
| US 5371074 | A | 19941206 | US 1993-67637 | 19930524 <-- |
| US 5380737 | A | 19950110 | US 1993-113508 | 19930827 <-- |
| US 5650422 | A | 19970722 | US 1994-270964 | 19940705 <-- |
| US 5464852 | A | 19951107 | US 1994-289113 | 19940811 <-- |
| FI 9404967 | A | 19941021 | FI 1994-4967 | 19941021 <-- |
| US 5578623 | A | 19961126 | US 1995-445240 | 19950519 <-- |
| US 5596012 | A | 19970121 | US 1995-449152 | 19950524 <-- |
| FI 9600488 | A | 19960202 | FI 1996-488 | 19960202 <-- |
| FI 9600489 | A | 19960202 | FI 1996-489 | 19960202 <-- |
| US 5773456 | A | 19980630 | US 1996-719216 | 19960925 <-- |
| US 5874432 | A | 19990223 | US 1997-803297 | 19970220 <-- |
| PRIORITY APPLN. INFO.: | | | | |
| | | US 1989-347125 | A | 19890504 |
| | | US 1989-347126 | A | 19890504 |
| | | US 1990-514920 | B2 | 19900426 |
| | | WO 1990-US2434 | A | 19900501 |

| | | | |
|----|-------------|----|----------|
| US | 1990-608068 | B2 | 19901101 |
| US | 1991-782016 | A | 19911024 |
| FI | 1991-5093 | A | 19911029 |
| US | 1991-793033 | A3 | 19911115 |
| US | 1991-793035 | B1 | 19911115 |
| US | 1993-67637 | A3 | 19930524 |
| US | 1993-113508 | A3 | 19930827 |
| US | 1994-270964 | B3 | 19940705 |
| US | 1994-289113 | A3 | 19940811 |
| FI | 1994-4967 | A | 19941021 |
| US | 1995-445240 | A3 | 19950519 |

OTHER SOURCE(S) : MARPAT 114:228897

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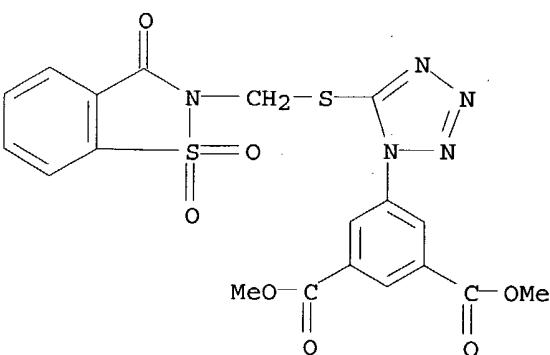
AB Saccharin derivs. [I; R = (CH:CH)mCHR2LnR1; L = O, S, SO, SO2; m, n = 0, 1; R1 = halo, alkanoyl, 1-oxophenalenyl, (substituted) Ph or heterocyclyl; R2 = H, carboalkoxy, Ph, PhS; R3 = H, halo, primary or secondary alkyl, alkoxy, carboalkoxy, Ph, fluoroalkyl, alkenyl, cyano; R4 = H, or 1 or 2 substituents selected from halo, cyano, NO₂, (substituted) NH₂, SO₂NH₂, OH, CHO, CH₂OH, (polyhalo)alkyl, alkylsulfonyl, cycloalkyl, etc.], protease inhibitors useful in the **treatment** of, e.g., emphysema, **rheumatoid arthritis**, and pancreatitis, are prepared by, e.g., (1) reaction of I (R = CH₂X; X = halo) with a LnR1 alkali metal salt; (2) reaction of I (R = H) with X₁CHR2LnR1 (X₁ = halo); and (3) oxidation of I [R = CH(SPh)CH₂CH₂LnR1] to the sulfoxide followed by elimination to give I (m = 1, R₂ = H). I (R = H) are prepared by lithiation of benzamides II (R₃ = R₅ = H, R₆ = alkyl) followed by **treatment** with R₃X₂ (X₂ = halo), lithiation of the resulting II (R₃ = primary or secondary alkyl; R₄, R₆ = same as above) followed by reaction with SO₂ and then a H₂NOSO₃H alkali metal salt, and heating the resulting I (R₃, R₆ = same above, R₅ = SO₂NH₂) for cyclization. Thus, diazotization of Me 6-methylanthranilate with NaNO₂ in concentrated HCl and AcOH followed by reaction with CuCl₂.2H₂O and SO₃ gave Me 6-methyl-2-(chlorosulfonyl)anthranilate which was stirred with aqueous NH₄OH to give 12% 4-methylsaccharin. Hydroxymethylation of the latter with HCHO in EtOH followed by acetylation with Ac₂O in the presence of concentrated H₂SO₄ gave 73% I (R = CH₂OAc, R₃ = Me, R₄ = H). A total of 124 I were prepared which in vitro inhibited elastase with $K_i \geq 0.3$ nM.

IT 133743-27-8P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as protease inhibitor)

RN 133743-27-8 CAPLUS

CN 1,3-Benzenedicarboxylic acid, 5-[5-[[{(1,1-dioxido-3-oxo-1,2-benzisothiazol-2(3H)-yl)methyl]thio]-1H-tetrazol-1-yl]-, dimethyl ester (9CI) (CA INDEX NAME)



ACCESSION NUMBER: 1990:515323 CAPLUS

DOCUMENT NUMBER: 113:115323

TITLE: Preparation of nonsteroidal antiinflammatory drugs

INVENTOR(S): Jackson, William Paul; Pettipher, Eric Roy

PATENT ASSIGNEE(S): Wellcome Foundation Ltd., UK

SOURCE: PCT Int. Appl., 54 pp.

CODEN: PIXXD2

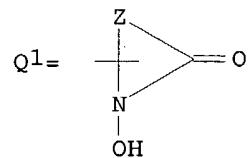
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|-------------------|----------|-----------------|--------------|
| WO 9001929 | A1 | 19900308 | WO 1989-GB992 | 19890825 <-- |
| W: JP, US | | | | |
| RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE | | | | |
| PRIORITY APPLN. INFO.: | | | GB 1988-20185 | 19880825 |
| OTHER SOURCE(S): | MARPAT 113:115323 | | | |
| GI | | | | |



AB Ar(LAr1)q(X)k(Y)pQ [I; k, p, q = 0.1; provided that when k = 1, p = 1; Ar = (un)substituted furyl, thienyl 1,1-dioxide, pyrryl, pyridyl, benzofuryl, Ph, etc.: L = (CH₂)_r, O, CH₂O, CH₂S, OCH₂, CONH, NHCO, CO, CH₂NH; r = 1-4; Ar1 = (un)substituted phenylene, thienylene, or pyridylene; X = O, S, CO; Y = C₁₋₁₀ alkylene or alkenylene; Q = Q1, (CO)_nN(OR1)(CO)_mR2; m, n = 0, 1; when n = 1, m = 0 and R1, R2 = H, C₁₋₄ alkyl or R2 = C₅₋₇ cycloalkyl; when n = 0, m = 1, R1 = H, C₁₋₄ alkyl, any one of Ar, alkanoyl, or (un)substituted CONH₂ and R2 = H, C₁₋₄ alkyl, NH₂, C₁₋₄ mono- or dialkylamino, anilino, etc.; Z = C₂₋₅ alkylene optionally interrupted by a hetero atom], useful for **treatment** of arthritis, e.g., **rheumatoid arthritis**, **rheumatoid spondylitis**, **osteoarthritis**, gouty arthritis, or reactive arthritis, are prepared. Thus, a solution of HSCH₂CO₂Me in THF was added dropwise to 1-(1-naphthyl)-2-nitroethene and Et₃N in THF and after stirring 30 min at room temperature, the mixture was evaporated in vacuo, dissolved in saturated aqueous NH₄Cl

in

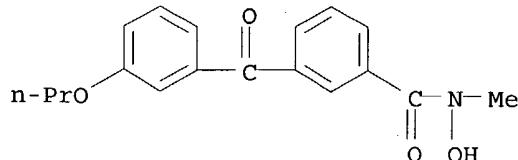
95 % EtOH, and then stirred 30 min with Zn powder to give 5,6-dihydro-1-hydroxy-5-(1-naphthyl)-1,4-thiazine-3(2H,4H)-one. A total of 88 I were prepared N-(3-Phenoxybenzyl)acetohydroxamic acid (II) reduced the ovalbumin-induced swelling (arthritis) in the right knee joint of rabbits immunized with ovalbumin in Freund's complete adjuvant and II in combination with indomethacin, up to 51 %. Tablets and an injection solution containing II were formulated.

IT 106328-20-5P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as antiarthritic)

RN 106328-20-5 CAPLUS

CN Benzamide, N-hydroxy-N-methyl-3-(3-propoxybenzoyl)- (9CI) (CA INDEX NAME)



ACCESSION NUMBER:

1990:514810 CAPLUS

DOCUMENT NUMBER:

113:114810

TITLE:

Preparation of p-substituted phenyl ester of pivalic acid as elastase inhibitors and pharmaceutical compositions

INVENTOR(S):

Imaki, Katsuhiro; Arai, Yoshinobu; Okegawa, Tadao

PATENT ASSIGNEE(S):

Ono Pharmaceutical Co., Ltd., Japan

SOURCE:

Eur. Pat. Appl., 91 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|--------------|
| EP 347168 | A1 | 19891220 | EP 1989-305959 | 19890613 <-- |
| EP 347168 | B1 | 19930901 | | |
| R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE | | | | |
| US 5017610 | A | 19910521 | US 1989-364994 | 19890612 <-- |
| CA 1340191 | A1 | 19981215 | CA 1989-602530 | 19890612 <-- |
| JP 03020253 | A2 | 19910129 | JP 1989-148479 | 19890613 <-- |
| JP 05081586 | B4 | 19931115 | | |
| AT 93843 | E | 19930915 | AT 1989-305959 | 19890613 <-- |
| ES 2059752 | T3 | 19941116 | ES 1989-305959 | 19890613 <-- |
| JP 06179645 | A2 | 19940628 | JP 1992-241380 | 19920819 <-- |
| JP 06094450 | B4 | 19941124 | | |
| US 5336681 | A | 19940809 | US 1992-960301 | 19921013 <-- |
| US 5403850 | A | 19950404 | US 1994-235856 | 19940429 <-- |
| PRIORITY APPLN. INFO.: | | | | |
| | | | JP 1988-145450 | 19880613 |
| | | | JP 1989-53541 | 19890306 |
| | | | US 1989-364994 | 19890612 |
| | | | EP 1989-305959 | 19890613 |
| | | | US 1991-681364 | 19910408 |
| | | | US 1992-960301 | 19921013 |

OTHER SOURCE(S): MARPAT 113:114810

GI For diagram(s), see printed CA Issue.

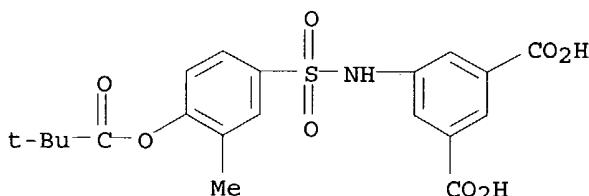
AB The title esters [I; Y = SO₂, CO; R₁, R₂ = H, (substituted) C₁-16 alkyl, Q (wherein X = bond, SO₂, C₁-4 alkylene optionally substituted with CO₂H or CO₂CH₂Ph; ring A is carbocyclic or heterocyclic; R₄ = H, C₁-8 alkyl, C₁-4 alkoxy, etc.; n = 1-5), R₁R₂N = (substituted) heterocyclic; R₃ = H, OH, C₁-6 alkyl, halo, C₁-4 alkoxy, C₂-5 acyloxy, m = 1-4], useful as elastase inhibitors in treating or preventing pulmonary emphysema, atherosclerosis, and rheumatoid arthritis, are preparedPivaloyl chloride (0.5 mL) was added to a solution of II (R = H) (preparation given) in Et₃N-CH₂Cl₂ under cooling and the solution was stirred 1 h at room temperature to give 510 mg II (R = pivaloyl), which showed elastase inhibition at 0.031 μM. Also prepared were 134 addnl. I.

IT 127373-55-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of, as elastase inhibitor)

RN 127373-55-1 CAPLUS

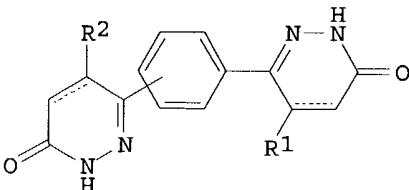
CN 1,3-Benzenedicarboxylic acid, 5-[[[4-(2,2-dimethyl-1-oxopropoxy)-3-methylphenyl]sulfonyl]amino]- (9CI) (CA INDEX NAME)



L6 ANSWER 27 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1987:156489 CAPLUS
 DOCUMENT NUMBER: 106:156489
 TITLE: Bis(6-oxopyridazinyl)benzene derivatives as drugs
 INVENTOR(S): Prain, Hunter Douglas; Warrington, Brian Herbert
 PATENT ASSIGNEE(S): Smith Kline and French Laboratories Ltd., UK
 SOURCE: Eur. Pat. Appl., 28 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|--------------|
| EP 208517 | A2 | 19870114 | EP 1986-305187 | 19860704 <-- |
| EP 208517 | A3 | 19880323 | | |
| EP 208517 | B1 | 19900912 | | |
| R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE | | | | |
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| US 4904664 | A | 19900227 | US 1986-880849 | 19860701 <-- |
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| AU 580677 | B2 | 19890127 | | |
| DK 8603169 | A | 19870106 | DK 1986-3169 | 19860703 <-- |
| ZA 8604954 | A | 19870225 | ZA 1986-4954 | 19860703 <-- |
| FI 8602840 | A | 19870106 | FI 1986-2840 | 19860704 <-- |
| NO 8602723 | A | 19870106 | NO 1986-2723 | 19860704 <-- |
| JP 62012765 | A2 | 19870121 | JP 1986-158634 | 19860704 <-- |
| JP 05086951 | B4 | 19931214 | | |
| HU 41393 | A2 | 19870428 | HU 1986-2821 | 19860704 <-- |
| ES 2000209 | A6 | 19880116 | ES 1986-129 | 19860704 <-- |
| AT 56440 | E | 19900915 | AT 1986-305187 | 19860704 <-- |
| CN 86105663 | A | 19870121 | CN 1986-105663 | 19860705 <-- |
| | | | GB 1985-17051 | 19850705 |
| | | | GB 1986-6853 | 19860320 |
| PRIORITY APPLN. INFO.: | | | EP 1986-305187 | 19860704 |

GI



AB The title compds. (I; R1, R2 = H, Me; dotted lines = optional double bonds; the benzene ring is m- or p-substituted) were prepared as phosphodiesterase inhibitors, useful in **treating** congestive heart failure. C6H4(COMe)2-1,4 condensed with HCOCO2H to give 1,4-(HO2CCH:CHCO)2C6H4 which cyclocondensed with N2H4 to give I (R1 = R2 = H, dotted line = bond, p-substituted) (II). In cats 0.04 μ mol II/kg increased left ventricular contractility 50%. Capsules were prepared containing active ingredient 0.5, soya lecithin/soybean oil 90.45, hydrogenated vegetable oil/beeswax 9.05%.

IT 107549-79-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and cyclocondensation of, with piperazine)

RN 107549-79-1 CAPLUS

CN 2-Butenoic acid, 4,4'-(1,3-phenylene)bis[4-oxo- (9CI) (CA INDEX NAME)

